Form 3160-3 (August 2007)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM	APPR	OVED
OMB N	lo. 1004	1-0137
Expires	July 31	, 2010

#### Lease Serial No. UTU-30096

APPLICATION FOR PERMIT TO	DRILL OF	REENTER		6. If Indian, Allote NA	e or Tribe	Name
la. Type of work: ✓ DRILL REENTE	ER			7 If Unit or CA Ag Wells Draw	reement, N	ame and No.
1b. Type of Well: Oil Well Gas Well Other	<b>✓</b> Sin	ngle Zone 🔲 Multip	ole Zone	8. Lease Name and Wells Draw Fe		-9-16
Name of Operator Newfield Production Company				9. API Well No.	3-013-	34154
3a. Address Route #3 Box 3630, Myton UT 84052		(include area code) 646-3721		10. Field and Pool, o Monument Bu	r Explorator	ry
4. Location of Well (Report location clearly and in accordance with an At surface NE/NE (Lot #1) 730' FNL 571' FEL At proposed prod. zone 20' FNL 1180' FEL	y State requirem	ents.*)		11. Sec., T. R. M. or Sec. 4, T9		
14. Distance in miles and direction from nearest town or post office* Approximately 12.4 miles southwest of Myton, UT				12. County or Parish Duchesne		13. State UT
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of a		17. Spacing	g Unit dedicated to this	s well	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 1115'	19. Proposed	5'	W	BIA Bond No. on file /YB000493		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5691' GL	22. Approxir	nate date work will star	t* 7	23. Estimated duration (7) days from SF		release
The following, completed in accordance with the requirements of Onshor	24. Attac	•	tached to thi	s form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System I SUPO must be filed with the appropriate Forest Service Office).</li> </ol>		<ul><li>4. Bond to cover the stem 20 above).</li><li>5. Operator certification</li></ul>	ne operatior ation	ns unless covered by a	v	·
25. Signature		(Printed/Typed) e Crozier			Date	83/ <b>R</b> S
Title Regulatory Specialist	t	Transfer with the manufacture of the same	Salaki e			
Approved by (Signaling)	Name Office	(Printed/Typed) BRADLEY		Less Servi.	Date 172-	22-08
Title  Application approval does not warrant or certify that the applicant holds conduct operations thereon.		ENVIRONMENT able title to those right		9	entitle the	applicant to
Conditions of approval, if any, are attached.  Fitle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr	ime for any pe	rson knowingly and v	villfully to m	ake to any department	or agency	of the United
States any false, fictitious or fraudulent statements or representations as to (Continued on page 2)	o any matter w	ithin its jurisdiction.				s on page 2)

Surf

575367X 4435150Y 40.065132 110.116252 BHV 575179X 4435365Y 40.647087 -110.118433

Federal Approval of this Action is Necessary

RECEIVED

DEC 08 2008

DIV. OF OIL, GAS & MINING

## T9S, R16E, S.L.B.&M.

S89°57'E (G.L.O.) 2646.83' (Measured) S89°57'E G.L.O. (Basis of Bearings) Brass Cap ,89°55' G.L.O. Bottom, 180°0' of Hole G.L.O. Lot 3 Lot 4 Lot 2 Hole Brass WELL LOCATION: WELLS DRAW B-4-9-16 ELEV. EXIST. GRADED GROUND = 5691' 1910 1910 Brass Cap N89°51'36"W - 2650.21' (Meas.)

N89°52'W - 80.22 (G.L.O.)



(C.L.O.)

80.16

S0.02'E

= SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (MYTON SE) WELLS DRAW B-4-9-16 (Surface Location) NAD 83 LATITUDE = 40° 03' 54.64" LONGITUDE = 110° 07' 01.14"

## NEWFIELD PRODUCTION COMPANY

WELL LOCATION, WELLS DRAW B-4-9-16, LOCATED AS SHOWN IN THE NE 1/4 NE 1/4 (LOT 1) OF SECTION 4, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



#### Note:

1. The bottom of hole footages are 20' FNL & 1180' FEL.

THIS IS TO CERTIFY THAT THE ABOVE PLOT WAS PREPARED FROM FIELD ROTE OF ACTUM, SURVEYS MADE BY ME OR UNDER MY SUPPRESSION AND THAT THE SAME ARE TRUE AND SORRECT TO THE BEST OF MY KNOWLEDGE AND FILES. No. 189377

REGISTER D LAND SURVEYOR REGISTRA DON (NO. 1903-2009) STATE OF STATE OF

## TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501

DATE SURVEYED: 07-03-08	SURVEYED BY: T.H.
DATE DRAWN: 07-15-08	DRAWN BY: F.T.M.
REVISED:	SCALE: 1" = 1000'

# NEWFIELD PRODUCTION COMPANY WELLS DRAW FEDERAL B-4-9-16 AT SURFACE: NE/NE (LOT #1) SECTION 4, T9S, R16E DUCHESNE COUNTY, UTAH

## **ONSHORE ORDER NO. 1**

## DRILLING PROGRAM

#### 1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

## 2. <u>ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:</u>

Uinta

0' - 1683'

Green River

1683'

Wasatch

6375'

## 3. <u>ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:</u>

Green River Formation 1683' - 6375' - Oil

## 4. PROPOSED CASING PROGRAM

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

## 5. <u>MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:</u>

Please refer to the Monument Butte Field SOP. See Exhibit "C".

## 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

## 7. <u>AUXILIARY SAFETY EQUIPMENT TO BE USED:</u>

Please refer to the Monument Butte Field SOP.

## 8. <u>TESTING, LOGGING AND CORING PROGRAMS:</u>

Please refer to the Monument Butte Field SOP.

## 9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

The anticipated maximum bottom hole pressure is 1800 psi. It is not anticipated that abnormal temperatures will be encountered.

#### 10. <u>ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:</u>

Please refer to the Monument Butte Field SOP.

# NEWFIELD PRODUCTION COMPANY WELLS DRAW FEDERAL B-4-9-16 AT SURFACE: NE/NE (LOT #1) SECTION 4, T9S, R16E DUCHESNE COUNTY, UTAH

## ONSHORE ORDER NO. 1

## MULTI-POINT SURFACE USE & OPERATIONS PLAN

## 1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site Wells Draw Federal B-4-9-16 located in the NE 1/4 NE 1/4 Section 4, T9S, R16E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly -6.2 miles  $\pm$  to it's junction with an existing dirt road to the southwest; proceed southwesterly -4.5 miles  $\pm$  to it's junction with an existing dirt road to the east; proceed southeasterly -0.3 miles  $\pm$  to it's junction with the beginning of the access road to the existing Wells Draw 1-4-9-16 well location.

## 2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionally off of the existing Wells Draw 1-4-9-16 well pad. See attached **Topographic Map "B"**.

## 3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

The proposed well will be drilled directionally off of the Wells Draw 1-4-9-16 well pad. There will be a pumping unit and a short flow line added to the tank battery for the proposed Wells Draw Federal B-4-9-16. All permanent surface equipment will be painted Carlsbad Canyon.

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

## 5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck for drilling purposes from the following water sources:

Johnson Water District Water Right: 43-7478

Neil Moon Pond

Water Right: 43-11787

Maurice Harvey Pond Water Right: 47-1358

Newfield Collector Well

Water Right: 41-3530 (A30414DV, contracted with the Duchesne County Conservancy District).

Please refer to the Monument Butte Field SOP. See Exhibit "A".

## 6. SOURCE OF CONSTRUCTION MATERIALS

The proposed Wells Draw Federal B-4-9-16 will be drilled off of the existing Wells Draw 1-4-9-16 well pad. No additional surface disturbance will be required for this location.

## 7. <u>METHODS FOR HANDLING WASTE DISPOSAL</u>

Please refer to the Monument Butte Field SOP.

#### 8. ANCILLARY FACILITIES

Please refer to the Monument Butte Field SOP.

## 9. WELL SITE LAYOUT

See attached Location Layout Diagram.

## 10. PLANS FOR RESTORATION OF SURFACE

Please refer to the Monument Butte Field SOP.

11. <u>SURFACE OWNERSHIP</u> - Bureau Of Land Management (Proposed location and access roads leading to).

#### 12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. Arch Report #644, 2/7/94. Paleontological Resource Survey prepared by, Alden Hamblin, 2/11/94. See attached report cover pages, Exhibit "D".

#### Water Disposal

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), State of Utah approved surface disposal facilities, or Federally approved surface disposal facilities.

## Threatened, Endangered, And Other Sensitive Species

None for the proposed Wells Draw Federal B-4-9-16.

#### Reserve Pit Liner

A 16 mil liner with felt is required. Please refer to the Monument Butte Field SOP.

#### **Location and Reserve Pit Reclamation**

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, to the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

Squirrell Tail

Elymus Elymoides

6 lbs/acre

Siberian Wheatgrass

Agropyron Fragile

2 lbs/acre

Gardner Saltbush Shadscale Fourwing Saltbush Scarlet Globemallow Atriplex Gardneri Atriplex Confertifolia Atriplex Canescens Sphaeralcea Conccinea

1 lbs/acre 1 lbs/acre 0.20 lbs/acre

1 lbs/acre

#### **Details of the On-Site Inspection**

The proposed Wells Draw Federal B-4-9-16 was on-sited on 8/22/08. The following were present; Dave Allred (Newfield Production), Tim Eaton (Newfield Production), Dave Gordon (Bureau of Land Management), and James Herford (Bureau of Land Management). Weather conditions were clear and ground cover was 100% open.

#### LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

Representative

Name:

Dave Allred

Address:

Route #3 Box 3630

Myton, UT 84052

Telephone:

(435) 646-3721

## Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #B-4-9-16 NE/NE Section 4, Township 9S, Range 16E: Lease UTU-30096 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

11/22/08	W fandilionis
Date	Mandie Crozier
	Regulatory Specialist
	Newfield Production Company

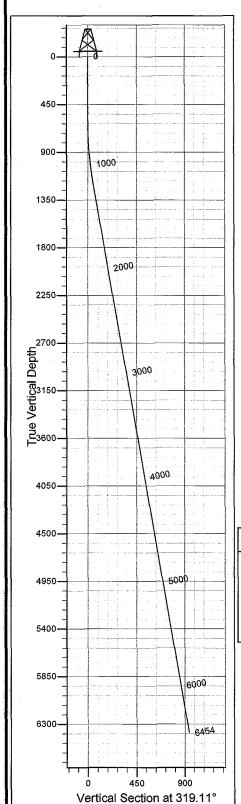
# NEWFIELD

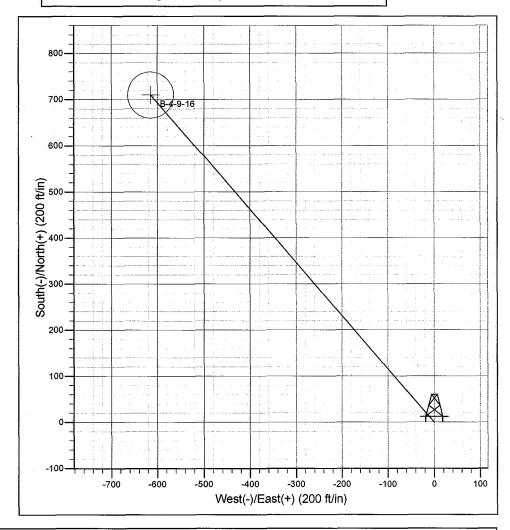
**ROCKY MOUNTAINS** 

## **Newfield Production Company**

Project: Monument Butte Site: Wells Draw B-4-9-16 Well: Wells Draw B-4-9-16

Wellbore: Wellbore #1
Design: Design #1





Target	VSec	TFace	DLeg	+E/-W	+N/-S	TVD	Azi	Inc	MD	Sec
, ,	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	1
	0.0	0.00	0.00	0.0	0.0	600.0	0.00	0.00	600.0	2
	55.5	319.11	1.50	-36.3	42.0	1248.8	319.11	9.78	1252.0	3
B-4-9-16	939.1	0.00	0.00	-614.7	710.0	6375.0	319.11	9.78	6453.8	4

PROJECT DETAILS: Monument Butte

Geodetic System: US State Plane 1983

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: Utah Central Zone System Datum: Mean Sea Level



Azimuths to True North Magnetic North: 11.65°

Magnetic Field Strength: 52549.6snT Dip Angle: 65.87° Date: 12/2/2008 Model: IGRF200510

\_\_\_\_\_

Created by: Hans Wychgram

Date: 12-02-2008







## Planning Report

Database: Company: EDM 2003.21 Single User Db Newfield Production Company

Project: Site:

Monument Butte

Well:

Wells Draw B-4-9-16 Wells Draw B-4-9-16

Wellbore: Design:

Wellbore #1 Design #1

**Local Co-ordinate Reference:** 

**TVD Reference: MD Reference:** 

North Reference:

Well Wells Draw B-4-9-16 RKB @ 5703.0ft (NDSI #2) RKB @ 5703.0ft (NDSI #2)

True

**Survey Calculation Method:** 

Minimum Curvature

**Project** 

Monument Butte

Map System:

US State Plane 1983

North American Datum 1983

Geo Datum: Map Zone:

Utah Central Zone

System Datum:

Mean Sea Level

Site

Wells Draw B-4-9-16

Site Position:

From:

Lat/Long

Northing: Easting:

2,193,179.78m

Latitude:

40° 3' 54.640 N

**Position Uncertainty:** 

0.0 ft

Slot Radius:

617,973.07 m

Longitude: Grid Convergence: 110° 7' 1.140 W

0.89°

Well

Wells Draw B-4-9-16

**Well Position** 

+N/-S +E/-W 0.0 ft 0.0 ft Northing: Easting:

2,193,179.78 m 617,973.07 m Latitude:

40° 3' 54.640 N 110° 7' 1.140 W

**Position Uncertainty** 

0.0 ft

Wellhead Elevation:

ft

Longitude: **Ground Level:** 

5,691.0 ft

Wellbore

Wellbore #1

**Magnetics** 

**Model Name** 

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

IGRF200510

12/2/2008

11.65

65.87

52,550

Design

Design #1

**Audit Notes:** 

Version:

Phase:

**PROTOTYPE** 

Tie On Depth:

0.0

**Vertical Section:** 

Depth From (TVD) (ft)

0.0

+N/-S (ft)

0.0

+E/-W (ft)

0.0

Direction (°)

319.11

**Plan Sections** 

	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
į	1,252.0	9.78	319.11	1,248.8	42.0	-36.3	1.50	1.50	0.00	319.11	
ł	6,453.8	9.78	319.11	6,375.0	710.0	-614.7	0.00	0.00	0.00	0.00 B-	4-9-16







## Planning Report

Database: Company: EDM 2003.21 Single User Db Newfield Production Company

Project: Site:

Monument Butte Wells Draw B-4-9-16

Well: Wellbore: Design: Wells Draw B-4-9-16 Wellbore #1 Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Wells Draw B-4-9-16 RKB @ 5703.0ft (NDSI #2) RKB @ 5703.0ft (NDSI #2)

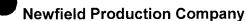
True

Minimum Curvature

## Planned Survey

	Measured Depth (ft)	inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
	200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
i	300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
	400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
	500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
	600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
	700.0	1.50	319.11	700.0	1.0	-0.9	1.3	1.50	1.50	0.00
	800.0	3.00	319.11	799.9	4.0	-3.4	5.2	1.50	1.50	0.00
	900.0	4.50	319.11	899.7	8.9	-7.7	11.8	1.50	1.50	0.00
	1,000.0	6.00	319.11	999.3	15.8	-13.7	20.9	1.50	1.50	0.00
i	1,100.0	7.50	319.11	1,098.6	24.7	-21.4	32.7	1.50	1.50	0.00
İ	1,200.0	9.00	319.11	1,197.5	35.6	-30.8	47.0	1.50	1.50	0.00
	1,252.0	9.78	319.11	1,248.8	42.0	-36.3	55.5	1.50	1.50	0.00
	1,300.0	9.78	319.11	1,296.1	48.1	-41.7	63.7	0.00	0.00	0.00
	1,400.0	9.78	319.11	1,394.7	61.0	-52.8	80.7	0.00	0.00	0.00
1	1,500.0	9.78	319.11	1,493.2	73.8	-63.9	97.6	0.00	0.00	0.00
	1,600.0	9.78	319.11	1,591.8	86.7	-75.0	114.6	0.00	0.00	0.00
!	1,700.0	9.78	319.11	1,690.3	99.5	-86.1	131.6	0.00	0.00	0.00
	1,800.0	9.78	319.11	1,788.9	112.3	-97.3	148.6	0.00	0.00	0.00
	1,900.0	9.78	319.11	1,887.4	125.2	-108.4	165.6	0.00	0.00	0.00
1	2,000.0	9.78	319.11	1,986.0	138.0	-119.5	182.6	0.00	0.00	0.00
	2,100.0	9.78	319.11	2,084.5	150.9	-130.6	199.6	0.00	0.00	0.00
	2,200.0	9.78	319.11	2,183.1	163.7	-141.7	216.5	0.00	0.00	0.00
!	2,300.0	9.78	319.11	2,281.6	176.6	-152.9	233.5	0.00	0.00	0.00
	2,400.0	9.78	319.11	2,380.2	189.4	-164.0	250.5	0.00	0.00	0.00
	2,500.0	9.78	319.11	2,478.7	202.2	-175.1	267.5	0.00	0.00	0.00
	2,600.0	9.78	319.11	2,577.2	215.1	-186.2	284.5	0.00	0.00	0.00
	2,700.0	9.78	319.11	2,675.8	227.9	-197.3	301.5	0.00	0.00	0.00
	2,800.0	9.78	319.11	2,774.3	240.8	-208.4	318.5	0.00	0.00	0.00
	2,900.0	9.78	319.11	2,872.9	253.6	-219.6	335.5	0.00	0.00	0.00
	3,000.0	9.78	319.11	2,971.4	266.5	-230.7	352.4	0.00	0.00	0.00
	3,100.0	9.78	319.11	3,070.0	279.3	-241.8	369.4	0.00	0.00	0.00
	3,200.0	9.78	319.11	3,168.5	292.1	-252.9	386. <b>4</b>	0.00	0.00	0.00
	3,300.0	9.78	319.1 <b>1</b>	3,267.1	305.0	-264.0	403.4	0.00	0.00	0.00
	3,400.0	9.78	319.11	3,365.6	317.8	-275.2	420.4	0.00	0.00	0.00
i	3,500.0	9.78	319.11	3,464.2	330.7	-286.3	437.4	0.00	0.00	0.00
	3,600.0	9.78	319.11	3,562.7	343.5	-297.4	454.4	0.00	0.00	0.00
İ	3,700.0	9.78	319.11	3,661.3	356.3	-308.5	471.3	0.00	0.00	0.00
	3,800.0	9.78	319.11	3,759.8	369.2	-319.6	488.3	0.00	0.00	0.00
	3,900.0	9.78	319.11	3,858.4	382.0	-330.8	505.3	0.00	0.00	0.00
:	4,000.0	9.78	319.11	3,956.9	394.9	-341.9	522.3	0.00	0.00	0.00
İ	4,100.0	9.78	319.11	4,055.4	407.7	-353.0	539.3	0.00	0.00	0.00
	4,200.0	9.78	319.11	4,154.0	420.6	-364.1	556.3	0.00	0.00	0.00
	4,300.0	9.78	319.11	4,252.5	433.4	-375.2	573.3	0.00	0.00	0.00
1	4,400.0	9.78	319.11	4,351.1	446.2	-386.3	590.3	0.00	0.00	0.00
	4,500.0	9.78	319.11	4,449.6	459.1	-397.5	607.2	0.00	0.00	0.00
1	4,600.0	9.78	319.11	4,548.2	471.9	-408.6	624.2	0.00	0.00	0.00
	4,700.0	9.78	319.11	4,646.7	484.8	-419.7	641.2	0.00	0.00	0.00
!	4,800.0	9.78	319.11	4,745.3	497.6	-430.8	658.2	0.00	0.00	0.00
	4,900.0	9.78	319.11	4,843.8	510.5	-441.9	675.2	0.00	0.00	0.00
	5,000.0	9.78	319.11	4,942.4	523.3	-453.1	692.2	0.00	0.00	0.00
	5,100.0	9.78	319.11	5,040.9	536.1	-464.2	709.2	0.00	0.00	0.00
1	5,200.0	9.78	319.11	5,139.5	549.0	-475.3	726.1	0.00	0.00	0.00







Database: Company: EDM 2003.21 Single User Db Newfield Production Company

Project: Mor

Monument Butte

Site: Well: Wells Draw B-4-9-16 Wells Draw B-4-9-16

Wellbore:

Wellbore #1

Design:

Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Wells Draw B-4-9-16 RKB @ 5703.0ft (NDSI #2)

RKB @ 5703.0ft (NDSI #2)

True

Minimum Curvature

## Planned Survey

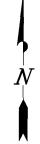
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.0	9.78	319.11	5,238.0	561.8	-486.4	743.1	0.00	0.00	0.00
5,400.0 5,500.0 5,600.0 5,700.0 5,800.0 5,900.0 6,000.0	9.78 9.78 9.78 9.78 9.78 9.78	319.11 319.11 319.11 319.11 319.11 319.11	5,336.6 5,435.1 5,533.6 5,632.2 5,730.7 5,829.3 5,927.8	574.7 587.5 600.4 613.2 626.0 638.9 651.7	-497.5 -508.7 -519.8 -530.9 -542.0 -553.1 -564.2	760.1 777.1 794.1 811.1 828.1 845.1 862.0	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
6,100.0 6,200.0 6,300.0 6,400.0 6,453.8	9.78 9.78 9.78 9.78 9.78	319.11 319.11 319.11 319.11 319.11	6,026.4 6,124.9 6,223.5 6,322.0 6,375.0	664.6 677.4 690.3 703.1 710.0	-575.4 -586.5 -597.6 -608.7 -614.7	879.0 896.0 913.0 930.0 939.1	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00

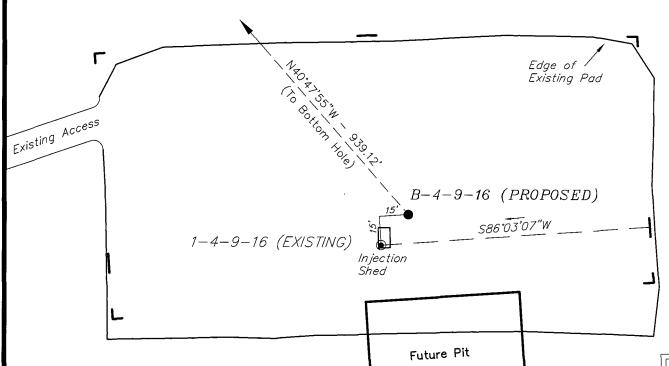
## NEWFIELD PRODUCTION COMPANY

WELL PAD INTERFERENCE PLAT

WELLS DRAW B-4-9-16 (Proposed Well) WELLS DRAW 1-4-9-16 (Existing Well)

Pad Location: NENE (LOT 1) Section 4, T9S, R16E, S.L.B.&M.





#### TOP HOLE FOOTAGES

B-4-9-16 (PROPOSED) 730' FNL & 571' FEL

## BOTTOM HOLE FOOTAGES

B-4-9-16 (PROPOSED) 20' FNL & 1180' FEL

Note:

Bearings are based on GLO Information.

RE	LATI	VE $C$	001	RDINATE	S
From	top	hole	to	bottom	hole

WELL	NORTH	EAST
B-4-9-16	711'	-614

SURVEYED BY:	T.H.	DATE SURVEYED:	07-03-08
DRAWN BY:	F.T.M.	DATE DRAWN:	07-17-08
SCALE: 1"	= 50'	REVISED:	

LATITUDE & LONGITUDE Surface position of Wells (NAD 83)

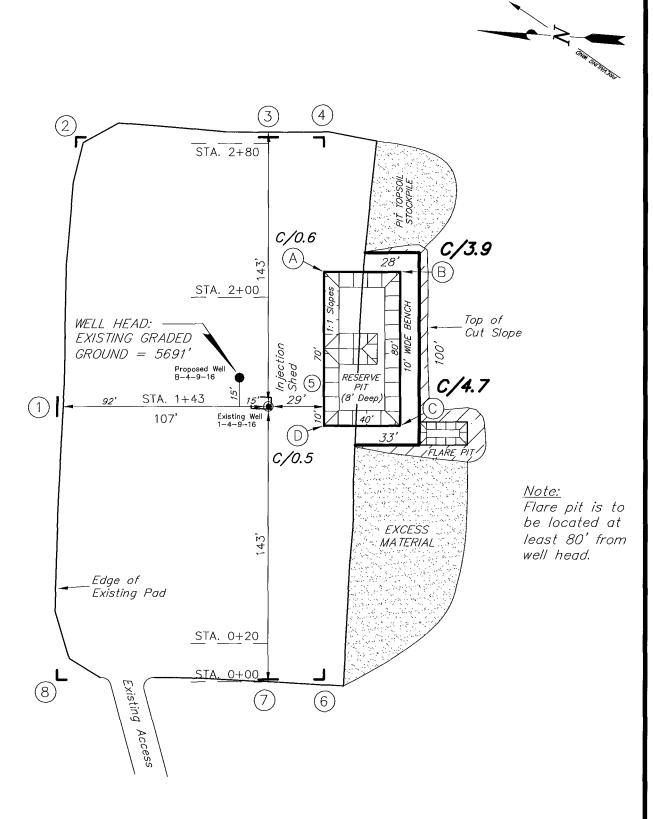
WELL	LATITUDE	LONGITUDE
B-4-9-16	40° 03' 54.64"	110° 07' 01.14"
1-4-9-16	40° 03' 54.48"	110° 07' 01.32"

Tri State (435) 781-2501 Land Surveying, Inc. 180 NORTH VERNAL AVE. VERNAL, UTAH 84078

## NEWFILLD PRODUCTION COMPANY

WELLS DRAW B-4-9-16 (Proposed Well) WELLS DRAW 1-4-9-16 (Existing Well)

Pad Location: NENE Section 4, T9S, R16E, S.L.B.&M.



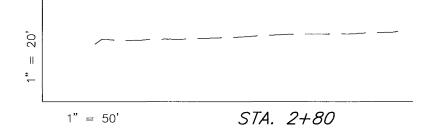
SURVEYED BY: T.H.	DATE SURVEYED:	07-03-08
DRAWN BY: F.T.M.	DATE DRAWN:	07-17-08
SCALE: 1" = 50'	REVISED:	

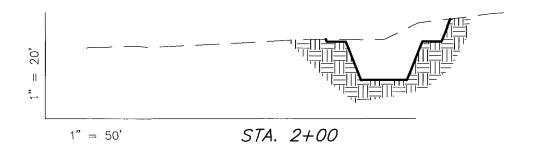
 $egin{array}{lll} egin{array}{lll} Tri & State & {}^{ ag{435}} {}^{ ag{781-2501}} \ & Land & Surveying, & Inc. \end{array}$  180 North Vernal ave. Vernal, Utah 84078

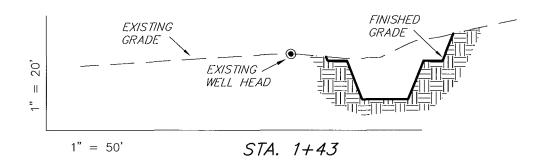
## NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

WELLS DRAW B-4-9-16 (Proposed Well) WELLS DRAW 1-4-9-16 (Existing Well)









NOTE: UNLESS OTHERWISE NOTED CUT SLOPES ARE AT 1:1 FILL SLOPES ARE AT 1.5:1 ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)

(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	620	0	Topsoil is not included	620
PIT	640	0	in Pad Cut	640
TOTALS	1,260	0	140	1,260

SURVEYED BY: T.H.	DATE SURVEYED:	07-03-08
DRAWN BY: F.T.M.	DATE DRAWN:	07-17-08
SCALE: $1" = 50'$	REVISED:	

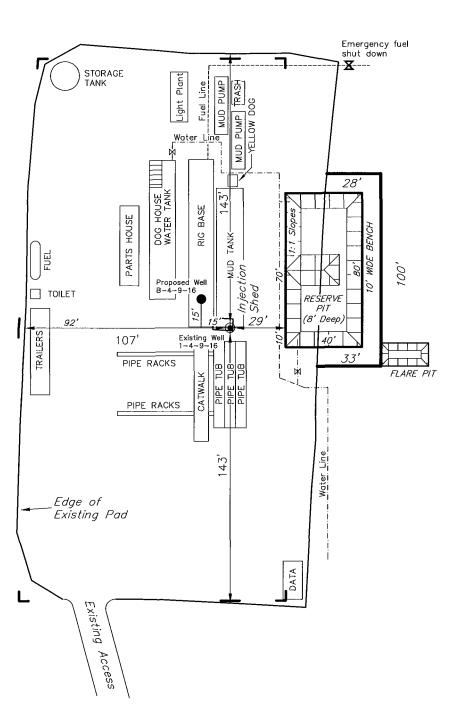
 $egin{array}{lll} egin{array}{lll} Tri & State & ^{(435)} & ^{781-2501} \ & Land & Surveying, & Inc. \ & \_ & \_ & \_ & 180 & NORTH & VERNAL & AVE. & VERNAL, & UTAH & 84078 \ \end{array}$ 

## NEWI-TELD PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

WELLS DRAW B-4-9-16 (Proposed Well) WELLS DRAW 1-4-9-16 (Existing Well)





Note: Flare pit is to be located at least 80' from well head.

SURVEYED BY: 1	Г.Н.	DATE SURVEYED:	07-03-08
DRAWN BY:	F.T.M.	DATE DRAWN:	07-17-08
SCALE: 1" =	= 50'	REVISED:	

 $abla Tri State (435) 781-2501 \ Land Surveying, Inc. \ldots 180 NORTH VERNAL AVE. VERNAL, UTAH 84078 \end{array}$ 

## Proposed Site Facility Diagram

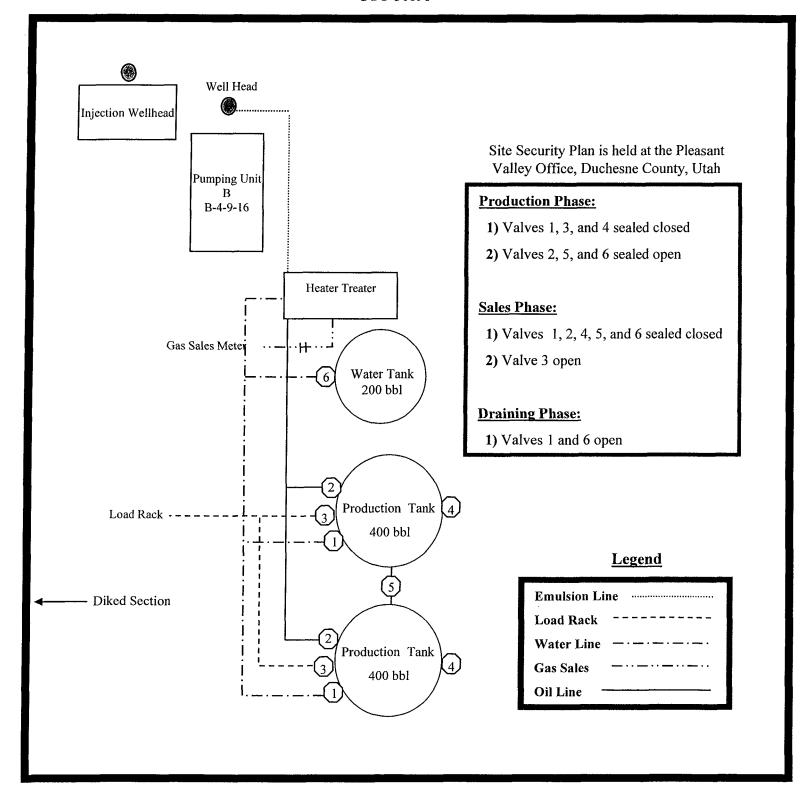
Wells Draw Federal B-4-9-16

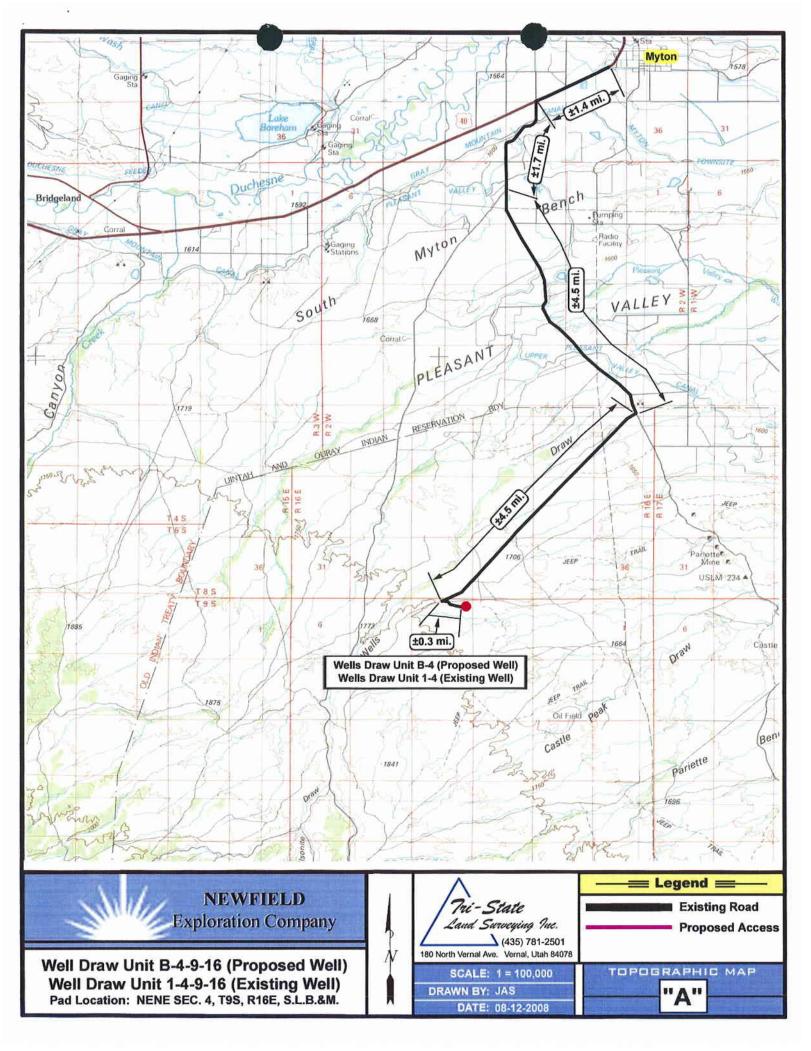
From the 1-4-9-16 Location

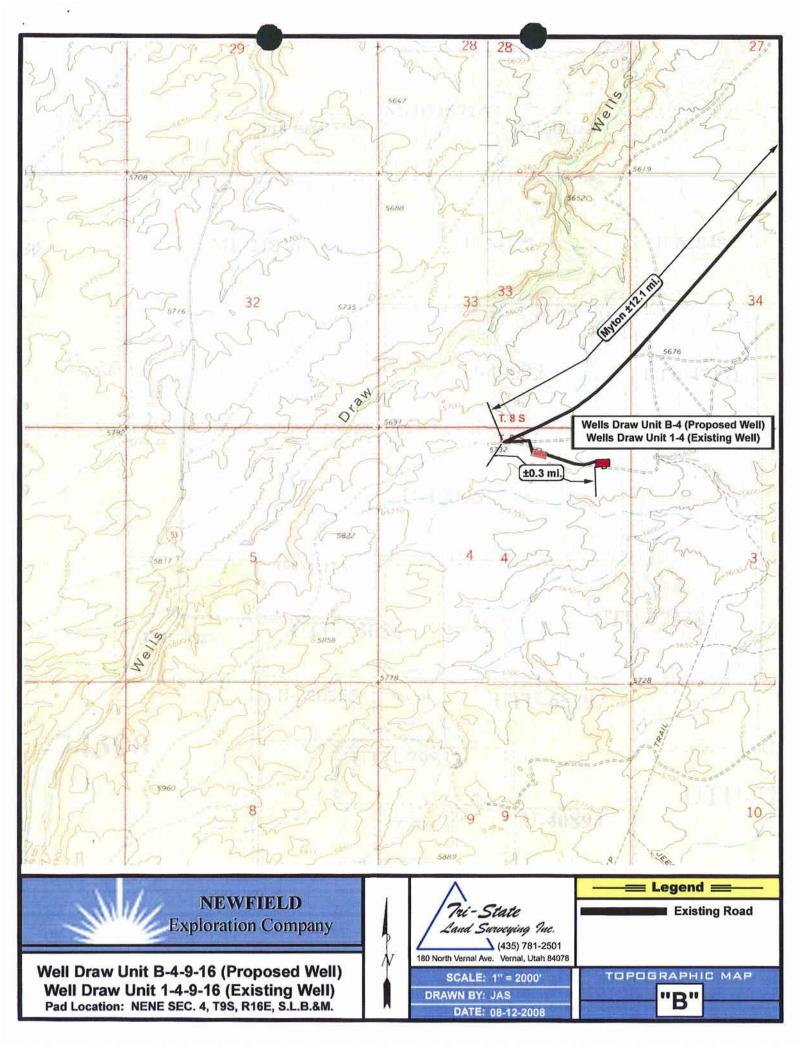
**NE/NE Sec. 4 T9S, R16E** 

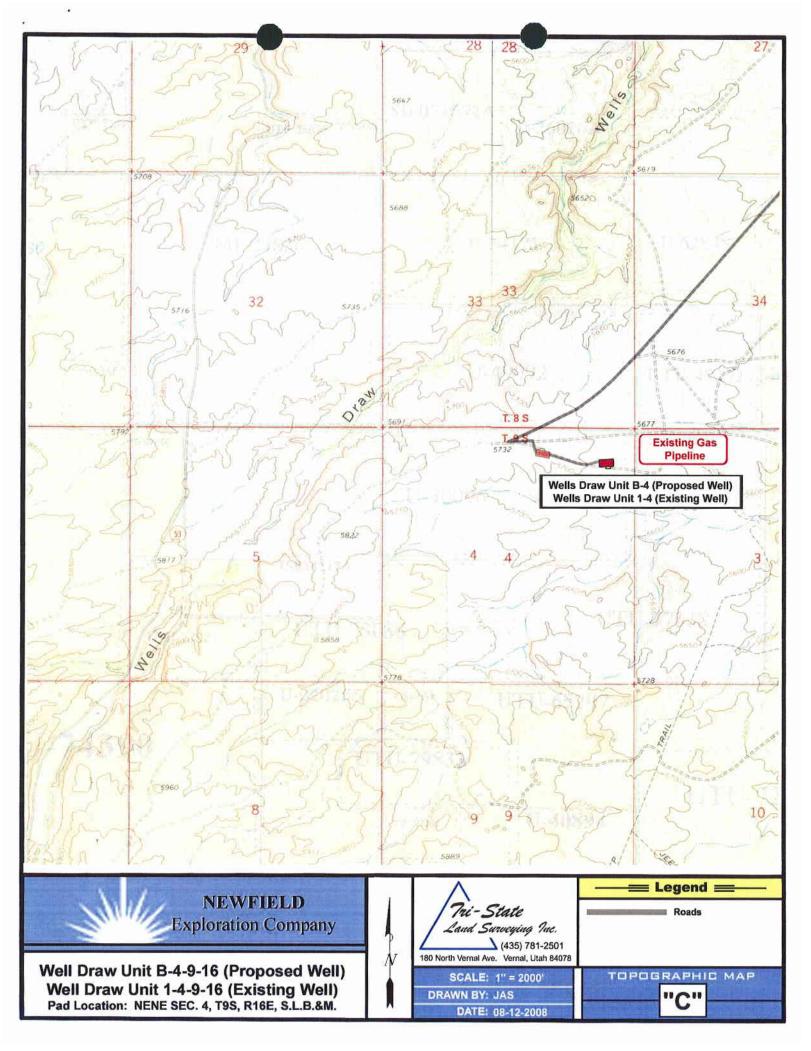
**Duchesne County, Utah** 

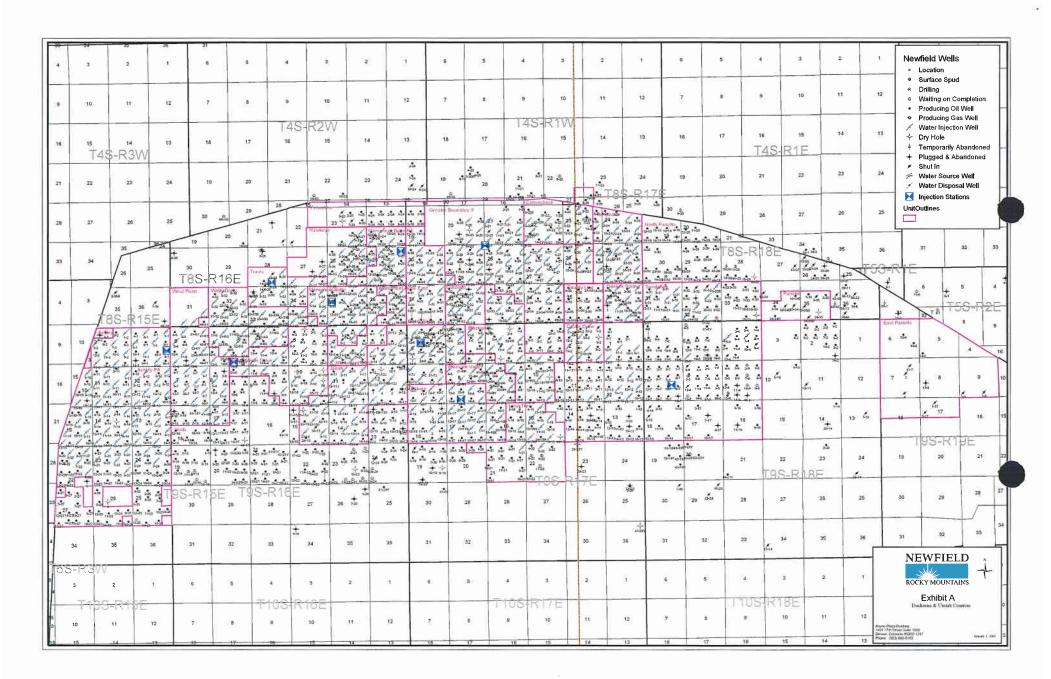
UTU-30096

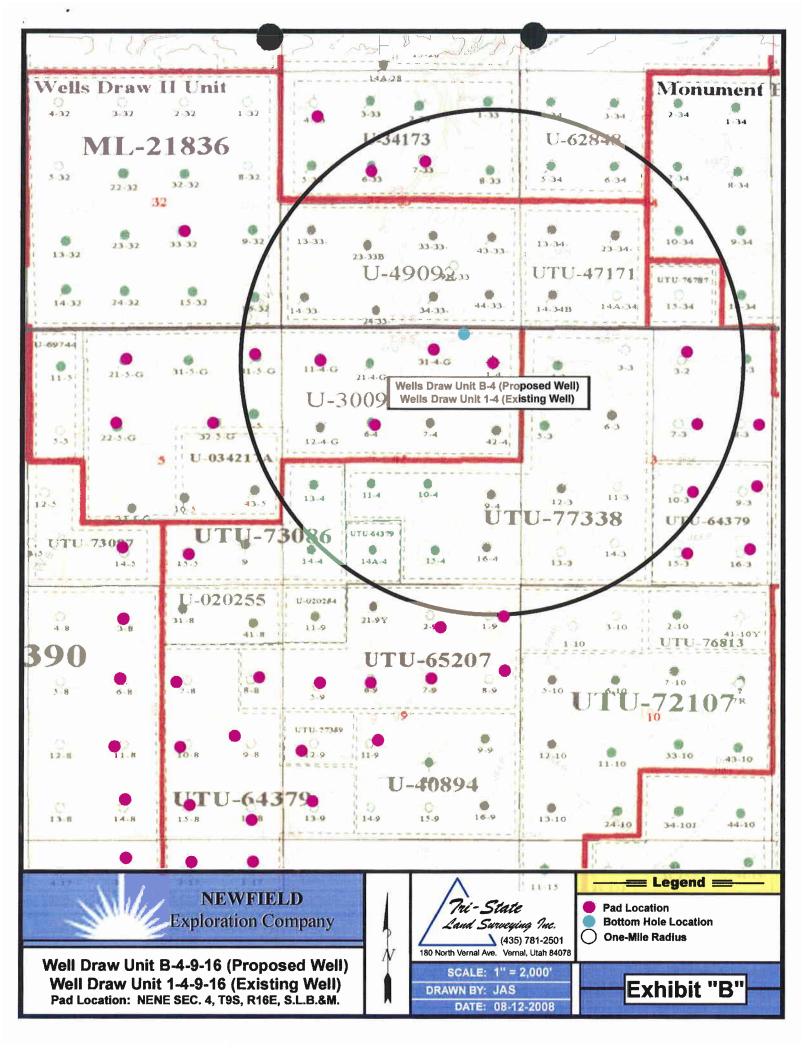






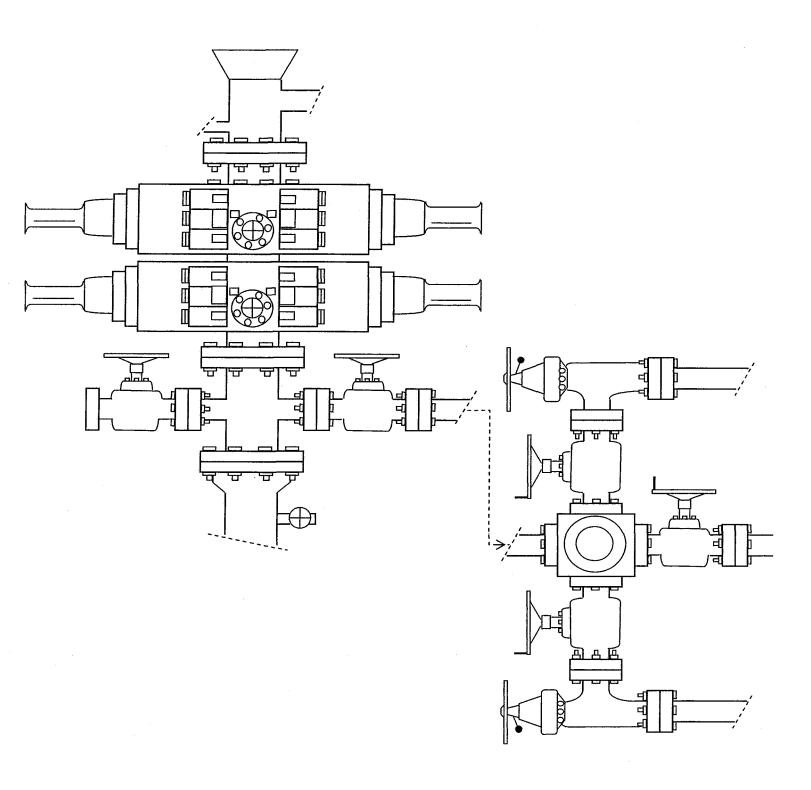






## 2-M SYSTEM

Blowout Prevention Equipment Systems



**EXHIBIT C** 

Shibit (0) . 644

## A CULTURAL RESOURCES BLOCK SURVEY IN

## THE WELLS DRAW UNIT

## NEAR WELLS DRAW, DUCHESNE COUNTY, UTAH

by

Heather M. Weymouth Archaeologist

Prepared for:

PG&E Resources Company 85 South 200 East Vernal, Utah 84078

Prepared by:

Sagebrush Archaeological Consultants 3670 Quincy Avenue, Suite 203 Ogden, Utah 84403

.Under Authority of Cultural Resources Use Permit No. 93-UT-54630

and

Utah State Antiquities Permit No. U-93-SJ-720b

Archaeological Report No. 644

February 7, 1994

## PG&E

## WELLS DRAW UNIT

Sections 33 and 34, T8S, R16E and Sections 4, 5, T9S, R16E, SLB&M

Duchesne County, Utah

## PALEONTOLOGY REPORT

**FOR** 

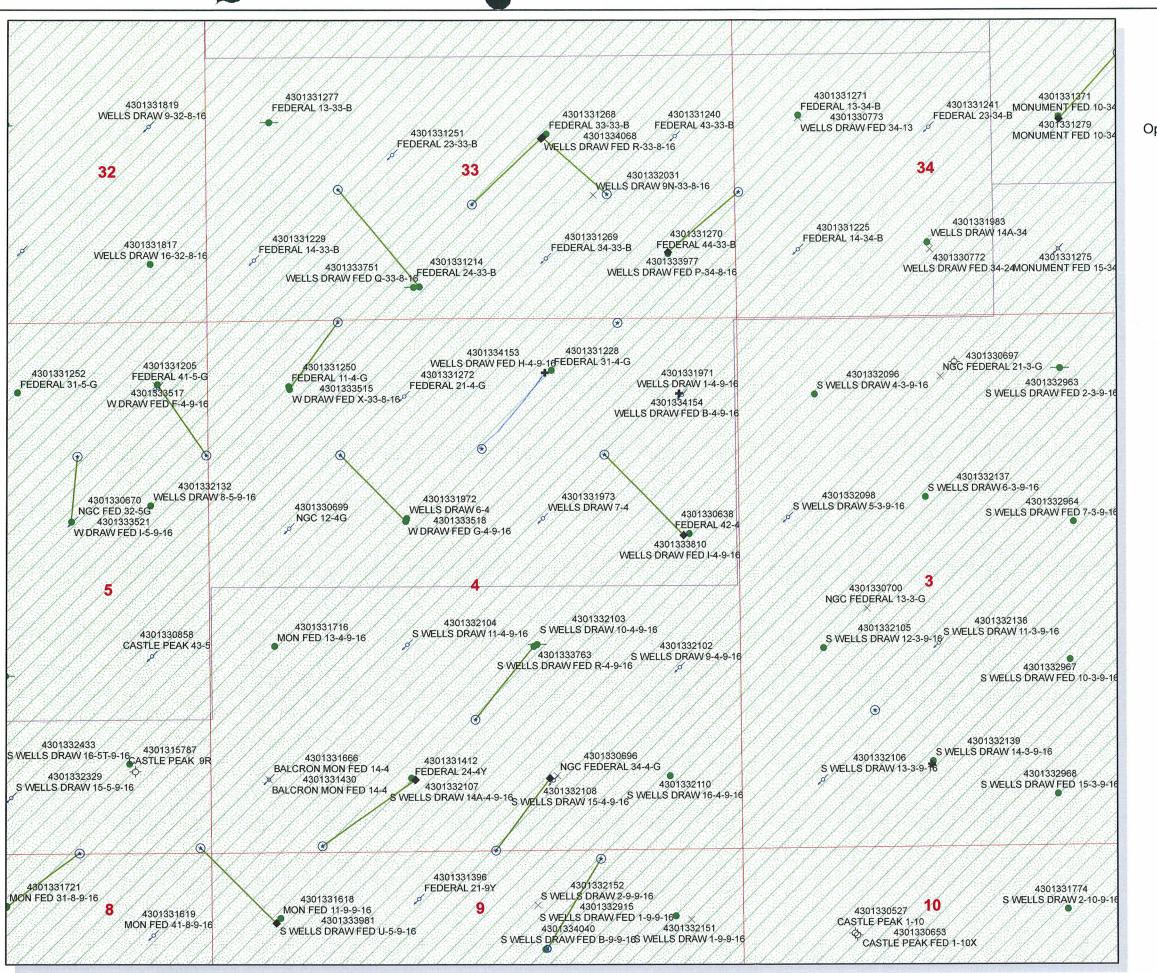
SAGEBRUSH ARCHAEOLOGICAL CONSULTANTS 3670 QUINCY AVENUE, SUITE 203 OGDEN, UTAH 84403

BY

ALDEN H. HAMBLIN PALEONTOLOGIST 235 EAST MAIN VERNAL, UTAH 84078

FEBRUARY 11, 1994

APD RECEIVED: 12/08/2008	API N	NO. ASSIGNED:	: 43-013	3-34154
WELL NAME: WELLS DRAW FED B-4-9-16  OPERATOR: NEWFIELD PRODUCTION ( N2695 )  CONTACT: MANDIE CROZIER	PHONE	NUMBER: 435-	-646-372	1
PROPOSED LOCATION:	INSPEC	CT LOCATN BY:	: /	/
NENE 04 090S 160E	Tech I	Review In	nitials	Date
SURFACE: 0730 FNL 0571 FEL BOTTOM: 0020 FNL 1180 FEL	Engine	eering		
COUNTY: DUCHESNE	Geolog	ah		
LATITUDE: 40.06513 LONGITUDE: -110.1163 UTM SURF EASTINGS: 575367 NORTHINGS: 44351	Surface			<del>.</del>
FIELD NAME: MONUMENT BUTTE ( 105  LEASE TYPE: 1 - Federal  LEASE NUMBER: UTU-30096  SURFACE OWNER: 1 - Federal	) PROPOS	ED FORMATION D METHANE WE		V
Plat  Bond: Fed[1] Ind[] Sta[] Fee[]  (No. WYB000493 )  Potash (Y/N)  N Oil Shale 190-5 (B) or 190-3 or 190-13  Water Permit  (No. 43-7478 )  RDCC Review (Y/N)  (Date: )  Fee Surf Agreement (Y/N)  N Intent to Commingle (Y/N)	Siting: R649-3-3  Drilling	DRAW (GRRV)  C. General  460 From Qtr/Qt  Cause No:  Cause No:  Cause No:	n	3(A) 2016 Strift
STIPULATIONS: STIPULATIONS: STIPULATIONS:	200			



**API Number: 4301334154** 

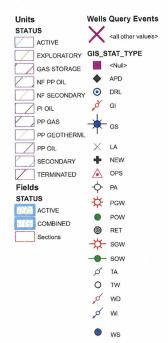
Well Name: WELLS DRAW FED B-4-9-16

Township 09.0 S Range 16.0 E Section 04

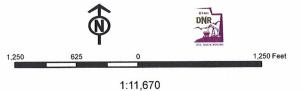
Meridian: SLBM

Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared:
Map Produced by Diana Mason







## **United States Department of the Interior**

## BUREAU OF LAND MANAGEMENT **Utah State Office**

P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

December 9, 2008

Memorandum

To:

Assistant District Manager Minerals, Vernal District

From:

Michael Coulthard, Petroleum Engineer

Subject:

2008 Plan of Development Wells Draw Unit, Duchesne

County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Wells Draw Unit, Duchesne County, Utah.

API#

WELL NAME

LOCATION

(Proposed PZ Green River)

43-013-34153 Wells Draw Fed H-4-9-16 Sec 04 T09S R16E 0512 FNL 1916 FEL BHL Sec 04 T09S R16E 1275 FNL 2740 FWL

43-013-34154 Wells Draw Fed B-4-9-16 Sec 04 T09S R16E 0730 FNL 0571 FEL BHL Sec 04 T09S R16E 0020 FNL 1180 FEL

43-013-34146 W Draw State N-32-8-16 Sec 32 T08S R16E 1809 FSL 0788 FWL BHL Sec 32 T08S R16E 2509 FSL 1340 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc:

File - Wells Draw Unit

Division of Oil Gas and Mining

Central Files Agr. Sec. Chron Fluid Chron



December 9, 2008

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason PO Box 145801 Salt Lake City, UT 84114-5801

RE:

**Directional Drilling** 

Wells Draw Federal B-4-9-16

Wells Draw Unit UTU-72613A

Surface Hole:

T9S R16E, Section 4: Lot 1

730' FNL 571' FEL

Bottom Hole:

T9S R16E, Section 4

20' FNL 1180' FEL

Duchesne County, Utah

Dear Ms. Mason;

Pursuant to the filing of Newfield Production Company's ("NPC") Application for Permit to Drill dated November 28, 2008, a copy of which is attached, for the above referenced well, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole location and bottom hole location of this well are both within the boundaries of the Wells Draw Unit UTU-72613A. Newfield certifies that it is the Wells Draw Unit Operator and all lands within 460 feet of the entire directional well bore are within the Wells Draw Unit.

NPC is permitting this well as a directional well in order to minimize surface disturbance. By directionally drilling from the referenced surface location, NPC will be able to utilize the existing roads and pipelines in this area.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4444 or by email at <a href="mailto:reveland@newfield.com">reveland@newfield.com</a>. Your consideration of this matter is greatly appreciated.

Sincerely,

Roxann Eveland Land Associate

Royann Eveland

DEC 1 5 2008

DIV. OF OIL, GAS & MINING

Form 3160-3 (August 2007)	·			APPROVED 1. 1004-0137 uly 31, 2010	
UNITED STATE DEPARTMENT OF THE BUREAU OF LAND MA	INTERIOR		5. Lease Serial No. UTU-30096		
APPLICATION FOR PERMIT TO	DRILL OR REENTER		6. If Indian, Allotee NA	or Tribe Name	
la. Type of work:	TER		<ol><li>If Unit or CA Agree Wells Draw</li></ol>	ement, Name ar	nd No.
lb. Type of Well: Oil Well Gas Well Other	Single Zone Multi	iple Zone	8. Lease Name and V Wells Draw Fed		3
Name of Operator Newfield Production Company			9. API Well No.		
3a. Address Route #3 Box 3630, Myton UT 84052	3b. Phone No. (include area code) (435) 646-3721		10. Field and Pool, or I Monument Butt	•	
4. Location of Well (Report location clearly and in accordance with a	my State requirements.*)		11. Sec., T. R. M. or Bl	•	r Area
At surface NE/NE (Lot #1) 730' FNL 571' FEL		-	Sec. 4, T9S	R16E	
At proposed prod. zone 20' FNL 1180' FEL					
<ol> <li>Distance in miles and direction from nearest town or post office*         Approximately 12.4 miles southwest of Myton, UT     </li> </ol>			12. County or Parish Duchesne	13. S UT	State
15. Distance from proposed* location to nearest property or lease line, ft. Approx. 20' f/lse, 1180' f/unit (Also to nearest drig. unit line, if any)	16. No. of acres in lease 602.24	17. Spacing	Unit dedicated to this w	ell	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 1115'	19. Proposed Depth 6375'	}	IA Bond No. on file YB000493		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5691' GL	22. Approximate date work will sta	<b>}</b>	23. Estimated duration (7) days from SPU		ıse
	24. Attachments				
The following, completed in accordance with the requirements of Onsho	re Oil and Gas Order No.1, must be a	ttached to this	form:		
Well plat certified by a registered surveyor.     A Drilling Plan.	4. Bond to cover the Item 20 above).	he operations	s unless covered by an	existing bond o	n file (see
3. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).			mation and/or plans as	may be require	d by the
25. Signature	Name (Printed/Typed) Mandie Crozier			Date Val	W8
Title ( )					r
Regulatory Specialist	N			Data	
Approved by (Signature)	Name (Printed/Typed)		1	Date	
Title	Office				
Application approval does not warrant or certify that the applicant hold conduct operations thereon.  Conditions of approval, if any, are attached.	s legal or equitable title to those right	ts in the subje	ect lease which would er	ititle the applica	antto
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a ct States any false, fictitious or fraudulent statements or representations as t	rime for any person knowingly and voo any matter within its jurisdiction.	villfully to ma	ke to any department or	agency of the	United

(Continued on page 2)

RECEIVED

\*(Instructions on page 2)

DEC 15 2008

DIV. OF OIL, GAS & MINING

## T9S, R16E, S.L.B.&M.

S89'57'E (G.L.O.) 2646.83' (Meosured) S89'57'E G.L.O. (Basis of Bearings) Bottom. 1800 of Hole G.L.Q. Lot 4 Lot 3 Lot 2 Top o. DRILLING Hole Brass WELL LOCATION: WELLS DRAW B-4-9-16 ELEV. EXIST. GRADED GROUND = 5691 1910 1910 Brass Cap Brass Cap N89'51'36"W - 2650.21' (Meas.)

N89'52'W - 80.22 (G.L.O.)

(G.L.O.)

80.16

S0.02'E

= SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (MYTON SE) WELLS DRAW B-4-9-16 (Surface Location) NAD 83 LATITUDE = 40°03′54.64" LONGITUDE = 110°07′01.14"

## NEWFIELD PRODUCTION COMPANY

WELL LOCATION, WELLS DRAW B-4-9-16, LOCATED AS SHOWN IN THE NE 1/4 NE 1/4 (LOT 1) OF SECTION 4, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



#### Note:

1. The bottom of hole footages are 20' FNL & 1180' FEL.

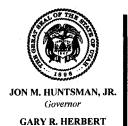
THIS IS TO CERTIFY THAT PHE ABOVE PERT WAS PREPARED FROM FIELD TO BE OF ACTUS, SURVEYS MADE BY ME OR UNDER MY SUPPRESIDENT ME THAT THE SAME ARE TRUE AND SORRECT TO THE BEST OF MY KNOWLEDGE AND SPLIES NO.189377

REGISTERED LAND SURVEYOR REGISTRA DON'THO. STATE OF STAMP TE OF USAMP TE OF US

## TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501

DATE SURVEYED: 07-03-08	SURVEYED BY: T.H.
DATE DRAWN: 07-15-08	DRAWN BY: F.T.M.
REVISED:	SCALE: 1" = 1000'



Lieutenant Governor

## State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA

Division Director

December 22, 2008

Newfield Production Company Rt. #3, Box 3630 Myton, UT 84052

Re:

Wells Draw Federal B-4-9-16 Well, Surface Location 730' FNL, 571' FEL, NE NE,

Sec. 4, T. 9 South, R. 16 East, Bottom Location 20' FNL, 1180' FEL, NE NE,

Sec. 4, T. 9 South, R. 16 East, Duchesne County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-34154.

Sincerely,

Gil Hunt

Associate Director

pab Enclosures

cc:

**Duchesne County Assessor** 

Bureau of Land Management, Vernal Field Office



Operator: Newfield Production Company				
Well Name & Number	Wells I	Oraw Federal B-4-9-16		
API Number:	43-013	-34154		
Lease:	UTU-3	0096		
Surface Location: NE NE NE Bottom Location: NE NE	Sec. <u>4</u> Sec. <u>4</u>	T. 9 South T. 9 South	<b>R.</b> 16 East R. 16 East	

## **Conditions of Approval**

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

## 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

• Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 (801) 733-0983 home

## 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Form 3160 -3	
(August 2007)	١

## RECEIVED VERNAL FIELD OFFICE

UNITED STATES

DEPARTMENT OF THE INTERIOR

PHREAM OF LAND WAY COMMENT FOR 2 20

FORM	APPRO	)VED
OMB N	lo. 1004-	0137
Expires	July 31,	2010

5.	Lease Serial No.
	UTU-30096

BUREAU OF LAND MAN	IAGEMENT	- 144 ( 7M					
APPLICATION FOR PERMIT TO DRILL OR REENTER			6. If Indian, Allotee NA	or Tribe N	ame	_	
la. Type of work:	<del>-10 U/-</del>	LAHU MGMT		7. If Unit or CA Agreement, Name and No. Wells Draw			
ib. Type of Well: Oil Well Gas Well Other	<b>✓</b> Sir	igle Zone Multij	ple Zone	8. Lease Name and V Wells Draw Fed		9-16	
Name of Operator Newfield Production Company		<u> </u>		9. API Well No.	3A1		
3a. Address Route #3 Box 3630, Myton UT 84052		(include area code) 646-3721	•	10. Field and Pool, or I Monument Butt	Exploratory		_
4. Location of Well (Report location clearly and in accordance with an At surface NE/NE (Lot #1) 730' FNL 571' FEL At proposed prod. zone 20' FNL 1180' FEL NEW 1	with carry State requirements.*)		11. Sec., T. R. M. or Blk. and Survey or Area Sec. 4, T9S R16E				
Distance in miles and direction from nearest town or post office*     Approximately 12.4 miles southwest of Myton, UT	E COT #	! /	<del>-</del>	12. County or Parish Duchesne		13. State UT	<del></del>
15. Distance from proposed* location to nearest property or lease line, ft. Approx. 20' f/lse, 1180' f/unit (Also to nearest drig. unit line, if any)	16. No. of acres in lease 17. Spacing 1602.24		acing Unit dedicated to this well  20 Acres				
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 1115'	' '			BIA Bond No. on file NYB000493			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5691' GL	1 121	nate date work will sta Arts. 2000		23. Estimated duration (7) days from SPL		release	
	24. Attac	hments					
<ol> <li>The following, completed in accordance with the requirements of Onsho</li> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).</li> </ol>		Bond to cover t Item 20 above).     Operator certification.	he operation	ons unless covered by an ormation and/or plans as			
25. Signature		(Printed Typed) le Crozier			Date		= <u>}</u>
Regulatory Specialist							
Approved by (Signature)		(Printed Typed)			Date	R 15	200
Lands & Mineral Resources	Office	VERNAL F	ELD C	rfioz.			
Application approval does not warrant or certify that the applicant hole conduct operations thereon.  Conditions of approval, if any, are attached.	ds legal or equi	table title to those right	nts in the su	bject lease which would o	entitle the a	pplicant to	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c States any false, fictitious or fraudulent statements or representations as	rime for any p to any matter w	erson knowingly and vithin its jurisdiction.	willfully to	make to any department of	or agency	of the Unite	d

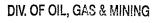
Continued on page 2)

\*(Instructions on page 2)

AFMSS# 095X50023A

HOTREGENEBOYAL

APR 2 0 2009







## UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

**VERNAL FIELD OFFICE VERNAL, UT 84078** 

(435) 781-4400



## CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Well No:

**Newfield Production Company** Wells Draw Federal B-4-9-16

Location:

Lot 1(NENE), Sec. 4, T9S, R16E

Lease No:

UTU-30096

API No:

43-013-34154

Agreement:

Wells Draw (GR) Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	,
NRS/Enviro Scientist:	Christine Cimiluca	(435) 781-4475	
NRS/Enviro Scientist:	Dan Emmett	(435) 781-3414	(435) 828-4029
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Lori Ford	(435) 781-4406	
NRS/Enviro Scientist:	David Gordon	(435) 781-4424	
NRS/Enviro Scientist:	James Hereford	(435) 781-3412	(435) 828-3546
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545
NRS/Enviro Scientist:	Paul Percival	(435) 781-4493	(435) 828-7381
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
	Fax: (435) 781-3420		

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR

FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

## NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.



## SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.
- Within 90 calendar days of the approval date for this Application for Permit to Drill (APD), the operator/lessee shall submit to the Authorized Officer (AO), on Sundry Notice Form 3160-5, an Interim/Final Surface Reclamation Plan for surface disturbance on well pads, access roads, and pipelines. At a minimum, this will include the reshaping of the pad to the original contour to the extent possible; the respreading of the top soil up to the rig anchor points; and, the area reseeded using appropriate reclamation methods. The AO will provide written approval or concurrence within 30 calendar days of receipt.

#### Interim Reclamation:

The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is dry and free of all trash and residual hydrocarbons it will be closed, it shall be recontoured and the topsoil respread, and the area shall be seeded using a rangeland drill. Seeding depth as per AO, or seed distributor. If portions of the site are too steep (>40%), or rocky, that portion may be broadcast seeded. If broadcasting seed, the seed shall be walked into the soil with a dozer immediately after the seeding is completed, or covered by soil using a drag chain. Seeding shall occur in the fall (August 1<sup>st</sup> until snow or ground is frozen) with the following seed mix:

#### Seed mix:

Common name	Latin name	lbs/acre	Recommended seed planting depth
Forage Kochia	Kochia Prostrata	0.20	1/2"
Squirreltail grass	Elymus elymoides	3.0 →	1/4 - 1/2"
Siberian wheatgrass	Agropyron fragile	1.0	1/2"
Shadscale saltbush	Atriplex confertifolia	0.50	1/2"
Four-wing saltbush	Atriplex canescens	0.50	1/2"
Gardner's saltbush	Atriplex gardneri	0.50	1/2"
Scarlet globemallow	Sphaeralcea coccinea	0.10	1/8 - 1/4"

Page 3 of 7 Well: Wells Draw Federal B-4-9-16 4/10/2009

- All pounds are pure live seed.
- All seed and mulch will be certified weed free.
- Rates are set for drill seeding; double rate if broadcasting.
- Reseeding may be required if initial seeding is not successful.

## Final reclamation:

Noxious and/or invasive weeds will be controlled along access roads, pipelines, well sites, and all other applicable facilities. Any noxious and/or invasive weeds outbreak, directly attributed to the activities of the Operator, will be the responsibility of the Operator to control. On BLM administered land, a Pesticide Use Proposal (PUP) must be submitted and approved prior to the application of herbicides, pesticides, or other possibly hazardous chemicals.

The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be seeded in the same manner as the location topsoil.

Once the location is plugged and abandoned, it shall be recontoured to natural topology, topsoil shall be respread, and the entire location shall be seeded with a seed mix recommended by the AO (see above). Seed application will follow all guidelines in the interim seed mix bullet statement above, and in Green River reclamation guidelines. If reclamation seeding should take place using the broadcast method, the seed at a minimum will be walked into the soil with a dozer immediately after the seeding is completed.

## DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

 Newfield Production Co. shall adhere to all referenced requirements in the SOP (version: June 24, 2008) along with all Oil and Gas rules and requirements listed in the Code of Federal Regulations and all Federal Onshore Oil and Gas Orders.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

## DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the
  daily drilling report. Components shall be operated and tested as required by Onshore Oil &
  Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be
  performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be
  reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water
  is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM
  Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth

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(from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
   Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum
   Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - o Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or

data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field
  Office Petroleum Engineers will be provided with a date and time for the initial meter calibration
  and all future meter proving schedules. A copy of the meter calibration reports shall be
  submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API
  standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All
  measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted
  to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs
  first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be
  adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively
  sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior
  approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30
  days, prior approval of the BLM Vernal Field Office shall be obtained and notification given
  before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office
  Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in
  order that a representative may witness plugging operations. If a well is suspended or
  abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent
  Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual
  plugging of the well bore, showing location of plugs, amount of cement in each, and amount of
  casing left in hole, and the current status of the surface restoration.

# Spud BLM - Vernal Field Office - Notification Form

Operator <u>Newfield Exploration</u> Rig
Name/# NDSI # 1 Submitted By Justin Crum Phone Number
<u>823-6733</u>
Well Name/Number Wells Draw Federal B-4-9-16
Qtr/Qtr NE/NE Section 4 Township 9s Range 16e
Lease Serial Number <u>UTU-30096</u>
API Number 43-013-34154
<u>Spud Notice</u> – Spud is the initial spudding of the well, not drilling out below a casing string.
Date/Time <u>5/27/09</u> <u>9:00</u> AM ⊠ PM □
<u>Casing</u> – Please report time casing run starts, not cementing times.
Surface Casing
<ul><li>Intermediate Casing</li><li>Production Casing</li></ul>
Liner
Other
Date/Time <u>5/27/09</u>
<u>BOPE</u>
Initial BOPE test at surface casing point
BOPE test at intermediate casing point
30 day BOPE test
Other
Date/Time AM PM
Remarks

OPERATOR: NEWFIELD PRODUCTION COMPANY

OPERATOR ACCT. NO.

N2695

ADDRESS: RT. 3 BOX 3630 MYTON, UT 84052

ACTION	CURRENT	NEW	1 151444555		. ,						
ACTION CODE	ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	- 00	sc	WELL	LOCATION	COUNTY	SPUD DATE	EFFECTIVE
В	99999	12419	4301333963	ASHLEY C-22-9-15	NWNE	22		15E	DUCHESNE	5/11/2009	5/28/ng
WELL 1 CO	MMENTS: GR	PN		BHL= NWNE				1		0,11,200	. <del>-                                   </del>
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME			ELL LOCA	TION		SPUD	EFFECTIVE
		V			90	sc	TP	RG	COUNTY	DATE	DATE
В	99999	12276	4301334154	WELLS DRAW B-4-9-16	NENE	4	95	16E	DUCHESNE	5/27/2009	5/28/09
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	aa	T SC	WELL	OCATION	COUNTY	SPUD DATE	EFFECTIVE
						"	<del>                                     </del>	110	COUNTY	DATE	<del>                                     </del>
A	99999		4301333454	FEDERAL 3-30-9-16	NENW	30	95	16E	DUCHESNE	5/16/2009	<u></u>
		1	Suplicat								
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME				OCATION		SPUD	EFFECTIVE
					QQ	SC	TP	RG	COUNTY	DATE	DATE
									-		
CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME				OCATION		SPUD	EFFECTIVE
		27777.130.			90	SC	TP	RG	COUNTY	DATE	DATE
WELL 5 COM	MMENTS:									<del></del>	
				· ·							
ACTION CODE	CURRENT	NEW	API NUMBER	WELL NAME			WELL L	OCATION		SPUD	EFFECTIVE
CODE	ENTITY NO.	ENTITY NO.		:	QQ	SC	TP	RG	COUNTY	DATE	DATE
WELL 5 CON									/	1	
A-ine B-we	DES (See instructions on bac aw entity for new well (single value) all to existing entity (group or a mone existing entity to another	well only) unit well)		RECEIVE	D				MA		Jentri Park
D- we	ill from one existing entity to a r (explain in comments sectio	new entity		MAY 2 8 2009	1		į.	/ /	Signature/ Production/Clerk		05/28/09
NOTE: Use (	COMMENT section to explain	why each Action Code	e was selected.	DIV. OF OIL, GAS & MI	NING						Date

### EORM 3160-5 igust 2007)

1. Type of Well Oil Well 2. Name of Ope NEWFIELD F 3a. Address

4. Location of Well

Section 4 T9S R16E

## **UNITED STATES** DEPARTMENT OF THE INTERIOR

(Footage, Sec., T., R., M., or Survey Description)

BUREAU OF LAND MANAGEMENT

OMB No. 1004-0137 Expires: July 31,2010

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE 11. County or Parish, State

DUCHESNE, UT

FORM APPROVED

SUNDRY NOTICES AND REP Do not use this form for proposals abandoned well. Use Form 3160-3 (A	6. If Indian, Allottee or Tribe Name.	
SUBMIT IN TRIPLICATE - Other	7. If Unit or CA/Agreement, Name and/or WELLS DRAW UNIT	
Gas Well Other	7	8. Well Name and No. WELLS DRW B-4-9-16
PRODUCTION COMPANY  Route 3 Box 3630  Myton, UT 84052	3b. Phone (include are code) 435 646 3721	9. API Well No. 4301334154 10. Field and Pool or Exploratory Area

12. CHECK APPROPRIATE BOX(ES) TO INIDICATE NATURE OF NOTICE, OR OTHER DATA									
TYPE OF SUBMISSION		TYPE OF ACTION							
□ Notice of Intent □ Subsequent Report □ Final Abandonment	Acidize Alter Casing Casing Repair Change Plans Convert to Injector	Deepen Fracture Treat New Construction Plug & Abandon Plug Back	Production (Start/Resume) Reclamation Recomplete Temporarily Abandon Water Disposal	Water Shut-Off  Well Integrity  Other Weekly Status Report					

435.646.372

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final

On 5/31/09 MIRU NDSI Rig # 1. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notifed of test. PU BHA and tag cement @ 275'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 6421'. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 164 jt's of 5.5 J-55, 15.5# csgn. Set @ 6415' / KB. Cement with 300 sks cement mixed @ 11.0 ppg & 3.43 yld. Then 400 sks cement mixed @ 14.4 ppg & 1.24 yld. Returned 37 bbls of cement to reserve pit. Nipple down Bop's. Drop slips @ 135,000 #'s tension. Release rig @ 6:00 AM on 6/8/09.

I hereby certify that the foregoing is true and correct (Printed/ Typed)  Justin Crum	Title Drilling Foreman		
Signature Lustin Luss THIS SPACE FOR FED	Date 06/19/2009 ERAL OR STATE OFFICE	CE USE	
Approved by  Conditions of approval, if any, are attached. Approval of this notice does not warrant or	Title	Date	
certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

## **NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT**

			5 1/2"	CASING SET AT	-	6415	-		
LAST CASING	5 1/2"	SET AT	6415		OPERATO	R	Newfield	Exploration	Company
DATUM		·		•	WELL	WELLS D	ORW B-4-9	-16	
DATUM TO CUT	OFF CASI	NG		_	FIELD/PRO	OSPECT	MB		
DATUM TO BRA	DENHEAD	FLANGE			CONTRAC	TOR & RIG	G#	NDSI#1	
TD DRILLER	6421	LOGO	6416						
HOLE SIZE	7_7/8"			_					
LOG OF CASING	S STDING:								
PIECES	OD OD	I ITEM - M	AKE - DES	CRIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH
1		Landing jt	AIRE - DEO	OI II II OI V	15.50	J-55	LTC	OONDI	14
163	5 1/2"	Casing			15.50	J-55	LTC		6382.48
1	5 1/2"	Float colla			15.50		<u> </u>		0.6
1	5 1/2"	Casing sho			15.50	J-55	LTC		20.15
1	5 1/2"	Guide sho	e						0.65
		Short jt @	4250						
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						<del></del>			<del>}</del>
CASING INVENT	ORY BAL.	<u> </u>	FEET	JTS	TOTAL LEI	NGTH OF S	L STRING	<u></u>	6417.88
TOTAL LENGTH	OF STRIN	G	6417.88		LESS CUT	OFF PIEC	E		14
LESS NON CSG	. ITEMS		15.25		PLUS DAT	UM TO T/C	OT OFF CS	SG .	12
PLUS FULL JTS.	LEFT OUT	•	195.53	5	CASING SI	ET DEPTH			6,415.88
	TOTAL		6598.16	5	٦				
TOTAL CSG. DE	L. (W/O TH	RDS)	6598.16	169	} сомра	RE			
	MING								
BEGIN RUN CSC	3	Spud	10:30 PM		GOOD CIR				
CSG. IN HOLE			2:30 AM	6/8/2009	Bbls CMT (				
BEGIN CIRC	47		2:30 AM		RECIPROC	CATED PIP	Yes		
BEGIN PUMP CN			4:07 AM	6/8/2009	RIIMDED E	N 110 TO	2360		
DEGREE CA	VI 1		4 7X 41// I	M/X//III/M	IK: 11\/12/F( ) b	41 I I I I I I I I I I I I I I I I I I I	7360		

5:22 AM

6/8/2009

PLUG DOWN

CEMENT USED		CEMEN	Γ COMPANY-	BJ		
STAGE	# SX	CEMEN	TYPE & ADDITI	VES		
1	300	F	PL+3%KCL+5#CSE+.	5#CF+2#KOL+.5SMS+FP	+SF	
2	400	50:5	0:2+3%KCL+.5%EC-	1+.25#CF+.05#CF+.3SM	S+FP-6L	
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<u> </u>						
			<del></del>			
CENTRALIZER 8				SHOW MAKE & S	PACINO	<del>}</del>
Middle first, top	second and t	hird. Then every third for a	total of 20			
COMPANY REP	RESENTATIVE	Justin Crum		DA	ATE	6/8/2009

### FORM 3160-5 ugust 2007)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM A	PPROVED
OMB No.	1004-0137
Expires: J	ulv 31.2010

SUNDR	RY NOTICES	AND REPO	RTS ON '	WELLS
Do not use	this form for	proposals to	drill or to	re-enter an

Lease Serial No.

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.  SUBMIT IN TRIPLICATE - Other Instructions on page 2					
		code) 4301334154	ool, or Exploratory Area		
		11. County or P DUCHESNE	arish, State UT		
		<del></del>			
Acidize Alter Casing Casing Repair Change Plans Convert to Injector	Deepen Fracture Treat New Construction Plug & Abandon Plug Back	Production (Start/Resume) Reclamation Recomplete Temporarily Abandon Water Disposal	Water Shut-Off  Well Integrity  Other  Spud Notice		
	APPROPRIATE BOX  Acidize  Acidize  Casing Repair  Change Plans	TRIPLICATE - Other Instructions on page 2  Other  Other  3b. Phone (include are 435.646.3721)  APPROPRIATE BOX(ES) TO INIDICATE NATE 1  Acidize Deepen Fracture Treat New Construction  Alter Casing Fracture Treat New Construction  Change Plans Plug & Abandon	APPROPRIATE BOX(ES) TO INIDICATE NATURE OF NOTICE, OR O  Acidize		

proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final

On 5/27/09 MIRU Ross # 29. Spud well @ 9:00 AM. Drill 315' of 12 1/4" hole with air mist. TIH W/ 8 Jt's 8 5/8" J-55 24 # csgn. Set @ 320.79' KB. On 5/29/09 cement with 160 sks of class "G" w/ 3% CaCL2 + 1/4# sk Cello- Flake Mixed @ 15.8 ppg > 1.17 cf/ sk yeild. Returned 5 bbls cement to pit. WOC.

I hereby certify that the foregoing is true and	Title		<del></del>				
correct (Printed/ Typed) Justin Crum	Drilling Foreman						
Signature Justin ( sum	Date 06/19/2009						
THIS SPACE FOR FEDERAL OR STATE OFFICE USE							
Approved by	Title	Date					
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office						
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any p	erson knowingly and willfully to make	to any department or agency of the United					

(Instructions on page 2)

States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

## **NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT**

		<del></del>	8 5/8"	CASING SET AT	<del>-</del>	320.79	-		
LAST CASING		SET AT			OPERATO	R	Newfield	Exploration	Company
DATUM				_	WELL	WELLS E	RW B-4-9	-16	
DATUM TO CUT	OFF CASI	NG	12		FIELD/PRO	SPECT	MB		
DATUM TO BRA	DENHEAD	FLANGE	12	_	CONTRAC	TOR & RIG	6 #	Ross # 29	
TD DRILLER			ER						
HOLE SIZE	12 1/4"			•					
LOG OF CASING	3 STRING:	· · · · · · · · · · · · · · · · · · ·							
PIECES	OD	ITEM - M	AKE - DES	CRIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH
1		guide shoe	)						0.9
1	8 5/8"	Shoe jt			24	J-55	STC	Α	34.45
7	8 5/8"	csg			24	J-55	STC	Α	274.49
1		WH-92							0.95
				-					
· · · · · · · · · · · · · · · · · · ·									
			<del></del>	***************************************					
						_			
0.0000000000000000000000000000000000000	[ODV DAI		FFFT	ITO	T0741 15	1071105.0			040.70
CASING INVENT			FEET	JTS	TOTAL LENGTH OF STRING				310.79
TOTAL LENGTH		<u> </u>	310.79	8	LESS CUT				2
LESS NON CSG PLUS FULL JTS.			1.85 0		CASING SE		UT OFF CS	oG .	320.79
<del></del>	TOTAL		308.94	8	10/10/10 01	_, , , , , , , , , , , , , , , , , , ,		L	
TOTAL CSG. DEL. (W/O THRDS)			308.94	8	COMPARE				
TIMING			000.01		00111171			/	
BEGIN RUN CSO		Spud	9:00 AM	5/27/2009	GOOD CIR	C THRU JO	)B	Yes	
CSG. IN HOLE	<del>'</del>		10:00 AM	******	Bbls CMT C				-
BEGIN CIRC			8:21 AM	5/29/2009	RECIPROC				
BEGIN PLIMP CA	MT		8.31 AM	5/29/2009					

5/29/2009

5/29/2009

8:44 AM

8:51 AM

BEGIN DSPL. CMT

PLUG DOWN

BUMPED PLUG TO 122

CEMENT USED		CEMENT C	OMPANY-	BJ							
STAGE	# SX	CEMENT T	YPE & ADDITIV	ES							
	1 160	Class G cement + 2% calcium chloride									
	<u> </u>										
		· · · · · · · · · · · · · · · · · · ·									
		· · · · · · · · · · · · · · · · · · ·									
		ER PLACEMENT	·	SHOW MAKE & SPACIN	NG						
Middle first top	of first top o	f second for a total of three.									
COMPANY REP	PRESENTATIV	/E Jim Smtih		DATE	5/29/2009						



# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

5. Lease Serial No.

### WELL COMPLETION OR RECOMPLETION REPORT AND LOG

													UTU.	30096	i 	
la. Type of V		<b>✓</b> Oil V	Vell	Ga	s Well		Other							ndian,	Allottee or Tr	ibe Name
b. Type of Completion: New Well Work Over Deepen Plug Back Diff. Resvr.,  Other:															Agreement	Name and No.
Nome of (	Inerator												FEDI	ERAL ase Nan	ne and Well N	<del>1</del> 0.
2. Name of ONEWFIELD	EXPLOF	RATION C	COMPA	ANY									SWD	FEDE	RAL B-4-9	
3. Address	1401 17TH S	T. SUITE 10	100 DENI	/ER. CC	80202			a. Phone 1 435)646		ude ar	ea code,	)		I Well 1 13-341		
						nce with Federa					-		10. F	ield and	Pool or Expl	oratory
A 4		/													NT BUTTE R., M., on Blo	ock and
At surface			EL (NI	E/NE)	SEC. 4,	Г9S, R16E								urvey of	. A	, T9S, R16E
At ton nro	FNI d. interval r		low RH	แ・วกต	י FSI &	1316' FFI							12 C	็ดเทรง ด	r Parish	13. State
								. مد د د				i		HESN		UT
	pth 6421	200			3 No. Reached	fe!	per	HS Date Com	M R			7			s (DF, RKB	
<ol> <li>Date Spt 05/27/2009</li> </ol>				7/200	9			D& A	<b></b> ✓ R	leady t	o Prod.		5691	'GL 5	703' KB	, K1, G <i>D</i> )
18. Total De	•	6421' 6290'			19. Plus		MD 6394' IVD ()	الكما د		20. D	epth Br	idge Plug		MD VD		
21. Type El			cal Logs	Run (S	Submit copy			e w			Vas well		Z No	,	Yes (Submit a	•
DUAL IND	GRD, SP	, COMP.	DENS	ITY,C	OMP. NE	UTRON,GR,0	CALIPER,	СМТ ВО	ND		Was DST Direction	run? al Survey?	✓ No		Yes (Submit i Yes (Submit o	report)
23. Casing	and Liner R	ecord (Re	port all	strings	set in well,	)	Stage C	Cementer	No	of Sks		Slurry	Vol			
Hole Size	Size/Gra	ide Wt.	(#/ft.)	Top	p (MD)	Bottom (MD)		epth	1	of Ce		(BB)		Ceme	ent Top*	Amount Pulled
12-1/4"	8-5/8" J-					315'			_		ASS G					
7-7/8"	5-1/2" J-	55 15.	5#			6415'					IMLITE 50 POZ			88'		
									400 30	J/30 F	-02					
						· · · · · · · · · · · · · · · · · · ·										
24. Tubing					T			(4.65)	l n ı	<b>7</b> 5 d	2.55\T	C.		- D 41	0 ( (40) ]	D. 1. D. 4 (MD)
Size 2-7/8"	Depth S EOT@	Set (MD)	Packe TA @ (	r Depth	(MD)	Size	Depth S	et (MD)	Packer	Depth	(MD)	Size		Depti	n Set (MD)	Packer Depth (MD)
25. Produci				0201		-112		rforation		44						
A) ODEEN	Formation	n		To	p	Bottom	_	rforated Ir	-		.49"	Size	No. H	oles	30	Perf. Status
A) GREEN B) GREEN							-+	5250-626 5048-50			.49		3		24	
C) GREEN								(CP.5) 5948-5954' .40" (LODC) SEE BELOW .40"				3 36				
D) GREEN						· · · · · ·		(LODC) SEE BELOW .40"				3 45				
27. Acid, Fr			ment Sq	ueeze,	etc.					1.50						tuise mot 1000
6250-6260	Depth Inter	val		rac CE	25 ede w/	65,818#'s of	20/40 sand		Amount:		•					
5948-5954						16,128#'s of										
5719-5747			F	rac LC	DDC sds v	w/ 113,694#'s	of 20/40 s	and in 82	26 bbls	of Lig	htning	17 fluid.				
5580-5626	5'		Fr	ac LO	DC sds w	// 111,498#'s	of 20/40 sa	and in 82	6 bbls o	of Ligi	ntning	17 fluid.				
28. Product Date First		al A Hours	Test		Oil	Gas	Water	Oil Gra	vity	Ga	10	Produ	uction M	ethod		
Produced	TÇSI DAIC	Tested	Produc		BBL		BBL	Corr. A			avity				c" 2 1/2" X 1	3/4" X 24' RHAC
06/29/09	07/19/09	24			82	18	85									
Choke	Tbg. Press.		24 Hr.		Oil		Water	Gas/Oil		- 1	ell Stati					
Size	Flwg. SI	Press.	Rate		BBL	MCF	BBL	Ratio		P	RODU	CING				
20 P 1	· · · · · · · · · · · · · · · · · · ·	1.0														
28a. Produc Date First	****	Hours	Test		Oil	Gas	Water	Oil Gra	vity	Ga	as	Prod	uction M	ethod		
Produced		Tested	Produc	ction	BBL	MCF	BBL	Согт. А	ΡΙ	Gı	ravity					
					0:1		W7 4	G (6)		.,,	-11 C · ·		····			
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate		Oil BBL	I I	Water BBL	Gas/Oil Ratio	l	W	ell Statu	IS		יח	=CEIV	/ED
	SI													HI	ECEI\	· <del></del> -
*(0			1.124	1 . 4		,								<b>1</b> .1	ov n 3	<del>2009</del>

<sup>\*(</sup>See instructions and spaces for additional data on page 2)

											<u>, , , , , , , , , , , , , , , , , , , </u>
28b. Prod Date First	uction - Inte	rval C Hours	Test	Oil	Gas	Water	lOi1 (	Gravity	Gas	Production Method	
Produced	Test Date	Tested	Production	BBL	MCF	BBL		API	Gravity	riodaetion (Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/ Ratio		Well Status		
	uction - Inte										
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL		Gravity . API	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/ Ratio	-	Well Status		
29. Dispo	sition of Ga	s (Solid, u	sed for fuel, ve	ented, etc.)	J	•				Jun-Vin 1	
USED FOR	RFUEL										
30. Sumr	nary of Porc	ous Zones	(Include Aqu	ifers):			• •		31. Formation	on (Log) Markers	
	ing depth in					intervals and al ing and shut-in			GEOLOGI	ICAL MARKERS	
		_			_				1		Тор
Fon	mation	Тор	Bottom		Des	criptions, Conte	ents, etc.			Name	Meas. Depth
									GARDEN GU GARDEN GU		3961' 4182'
									GARDEN GU POINT 3	LCH 2	4298' 4572'
									X MRKR Y MRKR		4837' 4873'
									DOUGALS CI BI CARBONA		4991' 5242'
									B LIMESTON CASTLE PEA		5363' 5920'
									BASAL CARB	3	6348' 6373'
Stage # Stage # Stage # Lightnin Stage # 20/40 sa Stage # Lightnin Stage # w/ 81,58	3 LODC so 44 LODC so 5 B2 sds. g 17 fluid. 6 C & D3 so and in 426 7 D1 sds. g 17 fluid. 8 GB6 & 0 80#'s of 20	ds. Perfords. Perforate bbls of Perfor. Perfor. GB4 sds./40 sand	orate LODC e B2 sds @ orate C sds ( Lightning 17 ate D1 sds ( Perforate ( I in 593 bbls	sds @ 57 sds @ 56 5340- 46 @ 5207- fluid. @ 5026- GB6 sds of Lightn	522- 26', 56 ' w/ 3 1/8" \$ 12', D3 sds 36' w/ 3 1/8 @ 4552- 56 ing 17 fluid	609- 12', 5598 Slick Guns w/ @ 5125- 28' " Slick Guns ' S', GB4 sds @	3 spf fo 3 spf fo w/ 3 1/8 w/ 3 spf 4499-	5576- 80' or total of 1 3" Slick Gu for total of	w/ 3 1/8" Slick 8 shots. Frac ns w/ 3 spf for f 30 shots. Fra	pf for total of 36 shots.  k Guns w/ 3 spf for total of 45  B2 sds w/ 35,758#'s of 20/40  r total of 24 shots. Frac C & D  ac D1 sds w/ 60,664#'s of 20/  ns w/ 3 spf for total of 24 shots	sand in 398 bbls of 03 sds w/ 30,316#'s of 40 sand in 510 bbls of
33. Indic	ate which it	ems have l	been attached	by placing	a check in th	e appropriate bo	oxes:				
		_	s (1 full set req		_	Geologic Repo		DST Re	eport	✓ Directional Survey	
34. I here	by certify the	hat the for	egoing and att	ached info	rmation is co	mplete and corr	ect as de	termined from	m all available r	ecords (see attached instructions)*	
	•		ammi Lee					Productio		, 	
								10/30/200			
						it a crime for a			and willfully to	make to any department or agency	of the United States any

(Continued on page 3) (Form 3160-4, page 2)



Project: USGS Myton SW (UT)

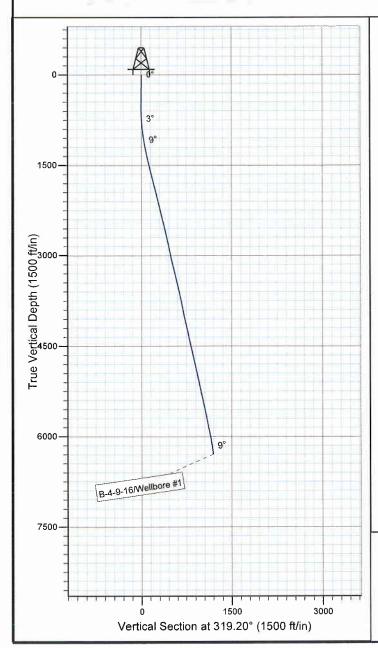
Site: SECTION 4
Well: B-4-9-16
Wellbore: Wellbore #1
SURVEY: Wellbore #1

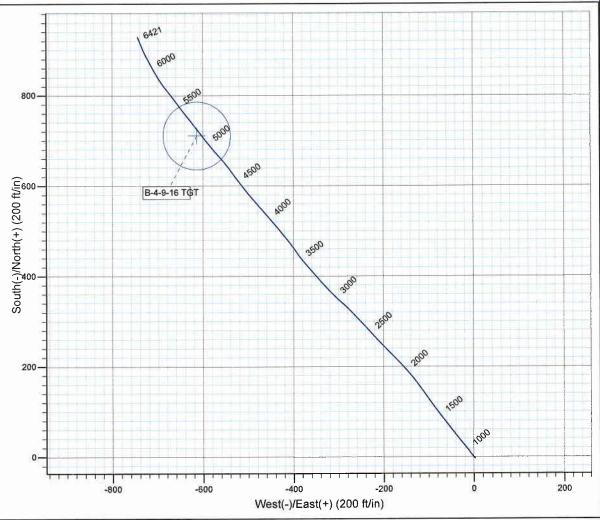
FINAL SURVEY REPORT



Azimuths to True North Magnetic North: 11.59°

Magnetic Field Strength: 52504.0snT Dip Angle: 65.86° Date: 2009/05/27 Model: IGRF200510







Design: Wellbore #1 (B-4-9-16/Wellbore #1)

Created By: Jim hudson

Date: 8:39, June 16 2009

THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA.



# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 4 B-4-9-16

Wellbore #1

Design: Wellbore #1

# **Standard Survey Report**

16 June, 2009





#### HATHAWAY BURNHAM

Survey Report



Company:

**NEWFIELD EXPLORATION** 

Project:

USGS Myton SW (UT)

Site:

**SECTION 4** 

Well:

B-4-9-16 Wellbore #1

Wellbore: Design:

Wellbore #1

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference:

Database:

Well B-4-9-16

B-4-9-16 @ 5703.0ft (RIG #1) B-4-9-16 @ 5703.0ft (RIG #1)

North Reference:

True

**Survey Calculation Method:** 

Minimum Curvature

EDM 2003.21 Single User Db

**Project** 

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System:

US State Plane 1983

System Datum:

Mean Sea Level

Geo Datum: Map Zone:

North American Datum 1983

**Utah Central Zone** 

Using geodetic scale factor

Site

SECTION 4, SEC 4 T9S, R16E

Site Position:

0.0 ft

Northing:

7,193,502.00ft

Latitude:

40° 3' 35.508 N

From:

Lat/Long

Easting:

2,026,216.16ft

Longitude:

**Position Uncertainty:** 

Slot Radius:

**Grid Convergence:** 

110° 7' 17.611 W 0.88°

Well

B-4-9-16, SHL LAT: 40 03 54.64, LONG: -110 07 01.14

**Well Position** 

+N/-S

0.0 ft

Northing:

7,195,457.31 ft

Latitude:

40° 3' 54.640 N

52,504

+E/-W

0.0 ft

Easting:

2009/05/27

2,027,466.66 ft

11.59

Longitude:

**Position Uncertainty** 

0.0 ft

Wellhead Elevation:

**Ground Level:** 

65.86

110° 7' 1.140 W

 $0.0\,\mathrm{ft}$ 

Wellbore

Wellbore #1

Magnetics

Sample Date **Model Name** 

Declination (°)

Dip Angle (°)

Field Strength

(nT)

Wellbore #1

IGRF200510

Design

Audit Notes:

1.0

Phase:

**ACTUAL** 

Tie On Depth:

0.0

Version:

Depth From (TVD)

+N/-S

+E/-W

Direction

Vertical Section:

(ft) 0.0 (ft) 0.0 (ft) 0.0

(°) 319.20

Survey Program

Date 2009/06/16

From

392.0

To

(ft)

Survey (Wellbore) 6,421.0 Survey #1 (Wellbore #1) **Tool Name** 

MWD

Description MWD - Standard

Survey

						Mandiani	DI	D. Hal	T
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
392.0	1.01	132.22	392.0	-2.3	2.6	-3.4	0.26	0.26	0.00
422.0	0.97	132.55	422.0	-2.7	2.9	-3.9	0.13	-0.13	1.10
453.0	0.91	138.32	453.0	-3.0	3.3	-4.5	0.36	-0.19	18.61
484.0	0.55	123.83	484.0	-3.3	3.6	-4.8	1.30	-1.16	-46.74
515.0	0.33	125.28	515.0	-3.4	3.8	-5.1	0.71	-0.71	4.68
546.0	0.08	87.09	546.0	-3.5	3.9	-5.2	0.88	-0.81	-123.19
577.0	0.48	313.38	577.0	-3.4	3.8	-5.1	1.74	1.29	-431.32
607.0	1.02	305.19	607.0	-3.2	3.5	-4.7	1.83	1.80	-27.30
637.0	1.78	306.77	637.0	-2.7	2.9	-4.0	2.54	2.53	5.27
668.0	2.46	309.21	667.9	-2.0	2.0	-2.8	2.21	2.19	7.87
699.0	2.94	313.30	698.9	-1.0	0.9	-1.4	1.67	1.55	13.19
729.0	3.34	316.61	728.9	0.1	-0.3	0.3	1.46	1.33	11.03



### **HATHAWAY BURNHAM**

Survey Report



Company:

**NEWFIELD EXPLORATION** 

Project:

USGS Myton SW (UT)

Site: Well: SECTION 4 B-4-9-16

Wellbore: Design: Wellbore #1

Local Co-ordinate Reference:

Well B-4-9-16

TVD Reference:

B-4-9-16 @ 5703.0ft (RIG #1) B-4-9-16 @ 5703.0ft (RIG #1)

North Reference:

True

**Survey Calculation Method:** 

Minimum Curvature

Database:

EDM 2003.21 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
(14)	()								73 73
760.0 791.0	3.76 4.22	319.21 321.78	759.8 790.7	1.5 3.2	-1.5 -2.9	2.2 4.3	1.45 1.59	1.35 1.48	8.39 8.29
821.0	4.68	324.92	820.6	5.1	-4.3	6.6	1.73	1.53	10.47
	5.19	324.39	851.5	7.3	- <del></del> .3	9.3	1.65	1.65	-1.71
852.0				9.6	-7.5	12.2	1.07	1.06	0.35
883.0	5.52	324.50	882.4					2.40	-0.50
913.0	6.24	324.35	912.2	12.1	-9.3	15.2	2.40		
944.0	6.94	322.83	943.0	15.0	-11.4	18.8	2.33	2.26	-4.90
976.0	7.65	321.40	974.8	18.2	-13.9	22.8	2.29	2.22	-4.47
1,006.0	8.20	319.21	1,004.5	21.4	-16.6	27.0	2.09	1.83	-7.30
1,038.0	8.57	319.01	1,036.1	24.9	-19.6	31.7	1.16	1.16	-0.63
1,069.0	9.01	320.06	1,066.8	28.5	-22.7	36.4	1.51	1.42	3.39
1,100.0	9.51	320.96	1,097.4	32.3	-25.9	41.4	1.68	1.61	2.90
1,132.0	9.78	321.95	1,128.9	36.5	-29.2	46.7	0.99	0.84	3.09
1,163.0	10.02	320.97	1,159.4	40.7	-32.5	52.1	0.95	0.77	-3.16
1,194.0	10.46	320.96	1,190.0	45.0	-36.0	57.6	1.42	1.42	-0.03
1,225.0	10.96	321.07	1,220.4	49.5	-39.6	63.3	1.61	1.61	0.35
1,256.0	11.50	322.29	1,250.8	54.2	-43.4	69.4	1.90	1.74	3.94
1,287.0	11.65	322.72	1,281.2	59.1	-47.1	75.6	0.56	0.48	1.39
1,318.0	11.93	322.06	1,311.5	64.1	-51.0	81.9	1.00	0.90	-2.13
1,350.0	12.17	322.06	1,342.8	69.4	-55.1	88.6	0.75	0.75	0.00
				74.8	-59.3	95.4	1.53	1.53	0.06
1,382.0 1,413.0	12.66 13.21	322.08 321.78	1,374.1 1,404.3	80.3	-63.6	102.4	1.79	1.77	-0.97
								0.77	0.13
1,444.0	13.45	321.82	1,434.5	85.9	-68.0	109.5	0.77		
1,538.0	14.52	323.25	1,525.7	104.0	-81.9	132.2	1.20	1.14	1.52
1,632.0	14.26	324.55	1,616.7	122.8	-95.6	155.5	0.44	-0.28	1.38
1,726.0	14.41	324.85	1,707.8	141.8	-109.1	178.6	0.18	0.16	0.32
1,820.0	14.72	323.54	1,798.8	161.0	-122.9	202.2	0.48	0.33	-1.39
1,914.0	14.48	320.57	1,889.7	179.7	-137.5	225.8	0.84	-0.26	-3.16
2,008.0	14.00	317.30	1,980.9	197.1	-152.6	248.9	1.00	-0.51	-3.48
2,101.0	13.31	315.22	2,071.2	213.0	-167.8	270.9	0.91	-0.74	-2.24
2,195.0	13.43	316.22	2,162.7	228.5	-183.0	292.6	0.28	0.13	1.06
2,289.0	13.23	314.97	2,254.1	244.0	-198.1	314.2	0.37	-0.21	-1.33
2,383.0	13.12	316.20	2,345.7	259.3	-213.1	335.6	0.32	-0.12	1.31
2,477.0	13.80	318.17	2,437.1	275.4	-228.0	357.4	0.87	0.72	2.10
2,570.0	13.04	316.14	2,527.5	291.2	-242.7	379.0	0.96	-0.82	-2.18
2,663.0	13.25	315.63	2,618.1	306.4	-257.4	400.1	0.26	0.23	-0.55
2,758.0	13.10	316.40	2,710.6	322.0	-272.4	421.7	0.24	-0.16	0.81
2,852.0	11.87	312.09	2,802.4	336.2	-286.9	442.0	1.64	-1.31	-4.59
2,832.0	11.16	311.30	2,894.5	348.6	-301.0	460.6	0.77	-0.76	-0.84
	12.37	315.99	2,985.5	361.8	-314.6	479.4	1.66	1.30	5.04
3,039.0			2,965.5 3,077.1	377.3	-329.1	500.6	1.47	1.39	2.14
3,133.0 3,227.0	13.68 13.38	318.00 316.98	3,077.1	393.5	-343.9	522.6	0.41	-0.32	-1.09
			•		-358.4	544.5	0.83	0.21	3.45
3,321.0	13.58	320.22	3,259.9 3,350.3	409.9	-358.4 -372.6	544.5 566.4	0.83	0.21	-1.20
3,414.0	13.67	319.10		426.6					
3,508.0	13.97	324.17	3,441.6	444.2	-386.5	588.8	1.33	0.32	5.39
3,602.0	13.82	323.69	3,532.8	462.4	-399.8	611.3	0.20	-0.16	-0.51 -1.05
3,696.0	13.51	322.70	3,624.2	480.2	-413.1	633.5	0.41	-0.33	-1.05
3,790.0	12.90	320.02	3,715.7	497.0	-426.5	654.9	0.92	-0.65	-2.85
3,884.0	12.11	320.02	3,807.5	512.6	-439.6	675.3	0.84	-0.84	0.00
3,978.0	11.87	317.14	3,899.4	527.2	-452.5	694.8	0.69	-0.26	-3.06
4,071.0	12.02	318.33	3,990.4	541.5	<b>-4</b> 65.4	714.0	0.31	0.16	1.28
4,165.0	12.24	319.49	4,082.3	556.4	-478.4	733.8	0.35	0.23	1.23
4,259.0	12.88	320.86	4,174.1	572.1	-491.5	754.2	0.75	0.68	1.46
4,353.0	13.01	321.60	.,	J. L	.01.0	1 0 1.2	0., 0	0.14	0.79



### **HATHAWAY BURNHAM**

Survey Report



Company: Project:

**NEWFIELD EXPLORATION** 

Projec

USGS Myton SW (UT)

Site: Well: SECTION 4 B-4-9-16

Wellbore: Design: Wellbore #1 Wellbore #1 Local Co-ordinate Reference:

Well B-4-9-16

TVD Reference:

B-4-9-16 @ 5703.0ft (RIG #1) B-4-9-16 @ 5703.0ft (RIG #1)

MD Reference: North Reference:

True

**Survey Calculation Method:** 

Minimum Curvature

Database:

EDM 2003.21 Single User Db

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,446.0	12.61	322.35	4,356.3	604.7	-517.4	795.8	0.47	-0.43	0.81
4,540.0	12.24	323.98	4,448.1	620.9	-529.5	816.0	0.54	-0.39	1.73
4,634.0	12.37	323.56	4,540.0	637.1	<i>-</i> 541.4	836.0	0.17	0.14	-0.48
4.727.0	12.17	320.15	4,630.9	652.6	-553.5	855.7	0.81	-0.22	-3.67
4,821.0	12.61	317.16	4,722.7	667.7	-566.9	875.9	0.83	0.47	-3.18
4,914.0	12.30	320.33	4,813.5	682.8	-580.1	895.9	0.81	-0.33	3.4
5.008.0	12.06	321.38	4,905.4	698.2	-592.6	915.8	0.35	-0.26	1.13
5,102.0	12.79	323.14	4,997.2	714.2	-605.0	936.0	0.87	0.78	1.8
5.196.0	12.33	321.56	5,088.9	730.4	-617.5	956.4	0.61	-0.49	-1.6
5,288.0	11.76	321.44	5,178.9	745.4	-629.4	975.5	0.62	-0.62	-0.1
5,301.1	11.78	321.55	5,191.7	747.5	-631.1	978.2	0.21	0.12	0.8
B-4-9-16 T	GT								
5,381.0	11.87	322.24	5,269.9	760.4	-641.2	994.6	0.21	0.12	8.0
5,475.0	12.35	325.05	5,361.8	776.3	-652.9	1,014.2	0.81	0.51	2.9
5,568.0	12.06	322.39	5,452.7	792.1	-664.5	1,033.8	0.68	-0.31	-2.8
5,662.0	12.04	319.93	5,544.7	807.4	-676.8	1,053.4	0.55	-0.02	-2.6
5,756.0	12.02	323.27	5,636.6	822.7	-689.0	1,073.0	0.74	-0.02	3.5
5,850.0	12.06	327.95	5,728.5	838.9	-700.0	1,092.5	1.04	0.04	4.9
5,944.0	11.91	332.48	5,820.5	855.8	-709.7	1,111.6	1.01	-0.16	4.8
6,038.0	11.16	331.97	5,912.6	872.5	-718.5	1,129.9	0.81	-0.80	-0.5
6,132.0	10.02	332.79	6,005.0	887.8	-726.5	1,146.7	1.22	-1.21	8.0
6,227.0	9.18	336.04	6,098.7	902.0	-733.4	1,162.0	1.05	-0.88	3.4
6,321.0	8.79	337.99	6,191.5	915.5	-739.1	1,176.0	0.53	-0.41	2.0
6,366.0	8.77	338.48	6,236.0	921.9	-741.6	1,182.5	0.17	-0.04	1.0
6.421.0	8.76	338.00	6.290.3	929.7	-744.7	1,190.4	0.13	-0.02	-0.8

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Checked By:	Approved By:	Date:	
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